

3RD AVENUE N BIKEWAY

NASHVILLE, TN.
3RD AVENUE N
FROM JAMES ROBERTSON PARKWAY TO BROADWAY

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SPECIAL NOTE

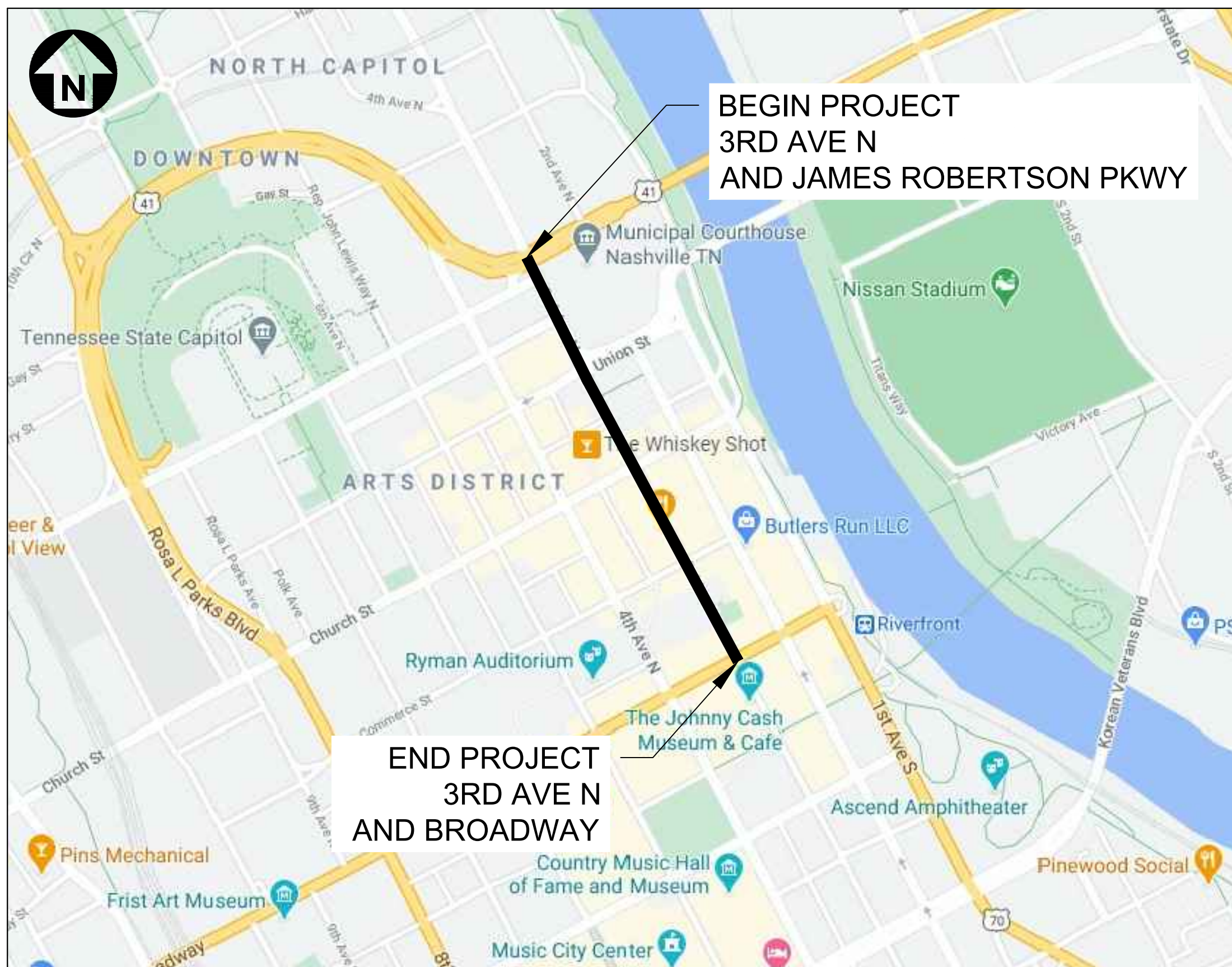
THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED: JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND THE PROPOSAL CONTRACT.

SPECIAL NOTE:
THE BASE SURVEY AND DESIGN INFORMATION FOR ROADWAY AND UTILITIES PRESENTED ON THIS PLAN WERE PROVIDED TO KCI TECHNOLOGIES, INC BY METRO PUBLIC WORKS. WHERE AVAILABLE, BASE INFORMATION HAS BEEN SUPPLEMENTED BY PLANS OBTAINED FROM METRO PUBLIC WORKS AND FIELD OBSERVATIONS BY THE ENGINEER. KCI TECHNOLOGIES, INC MAKES NO CLAIMS AS TO THE COMPLETENESS OR ACCURACY OF THE PROVIDED BASE INFORMATION.

DESIGNED BY KCI TECHNOLOGIES, INC.

DESIGNER JOSH GREEN, P.E.

P.E. NO. 118284



LOCATION MAP

NOT TO SCALE

APPROX. PROJECT LENGTH = 2,200 L.F. (0.42 L.M.)

*3RD AVENUE NORTH SPEED LIMIT IS NOT
POSTED WITHIN PROJECT LIMITS

*NASHVILLE'S CURRENT CODE OF ORDINANCES SETS THE MAXIMUM
SPEED LIMIT FOR A ROADWAY IN AN URBAN DISTRICT AS 30 M.P.H. IN
THE ABSENCE OF A POSTED SPEED LIMIT.

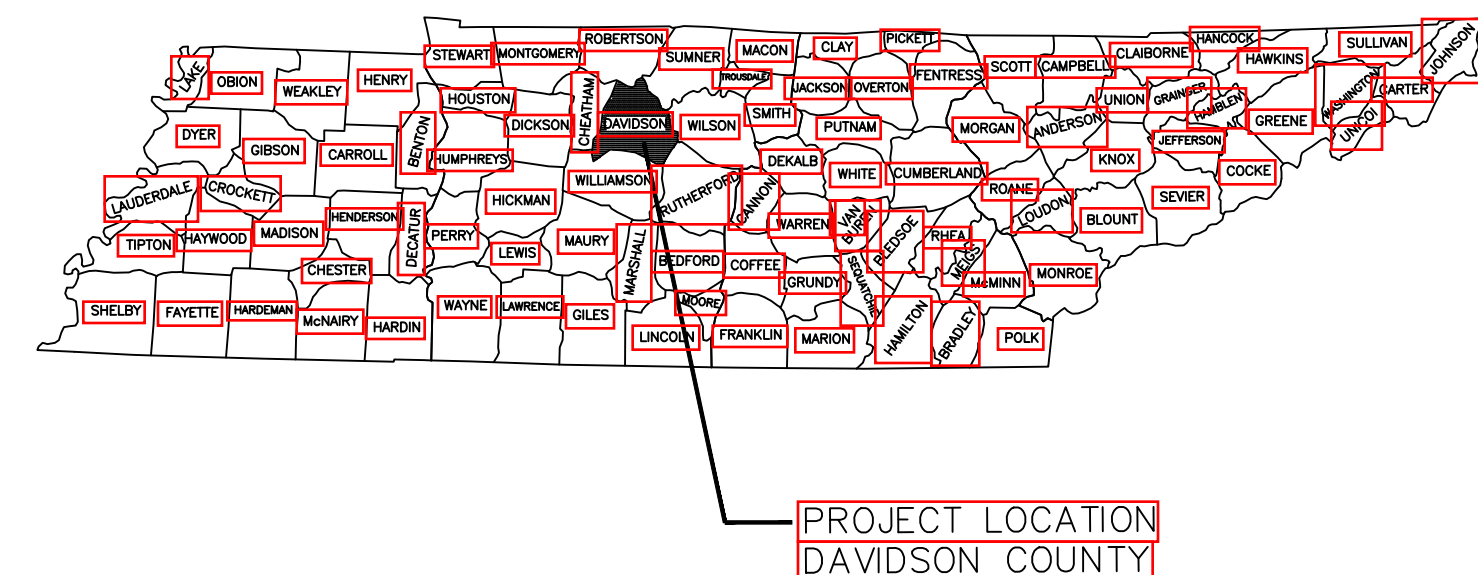
T.D.O.T. STANDARD DRAWINGS

RD-A-1	STANDARD ABBREVIATIONS
RD-L-1	STANDARD LEGEND
RD-L-2	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
T-M-1	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-3	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-11	SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AND OR ROUTES
T-M-12	SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES ON URBAN ROADWAYS
T-M-13	SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES
T-M-14	SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AT INTERSECTIONS
T-S-9	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-16	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-16A	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	STANDARD GROUND MOUNTED SIGN USING PERFORATED/ KNOCKOUT SQUARE TUBE
T-S-19	STANDARD STEEL SIGN SUPPORTS
T-S-20	SIGN DETAILS
T-SG-6	PEDESTRIAN SIGNAL DETAILS
T-SG-7A	TYPICAL SIGN HEAD PLACEMENT - APPROACHES WITH NO THROUGH MOVEMENTS
T-SG-7B	TYPICAL SIGN HEAD PLACEMENT - APPROACHES WITH NO THROUGH MOVEMENTS
T-SG-7C	TYPICAL SIGN HEAD PLACEMENT - ONE-LANE AND TWO-LANE APPROACHES
T-SG-7D	TYPICAL SIGN HEAD PLACEMENT - TWO-LANE APPROACHES
T-SG-12	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS

METRO STANDARD DRAWINGS

ST-321	ALTERATION CONST. CURB RAMP W/ SIDEWALK LESS THAN 9 FEET
ST-502	BIKE LANES WITH ON-STREET PARKING PERMITTED
ST-503	BIKE LANES WITH ON-STREET PARKING PROHIBITED
ST-504	PAVEMENT MARKINGS AND SIGNS FOR BIKE LANES

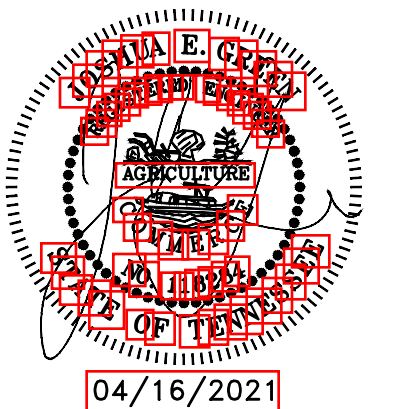
PROJECT DEMONSTRATION NOTE:
THESE PLANS DETAIL PROPOSED BIKEWAY AND ROADWAY
IMPROVEMENTS FOR TEMPORARY DEMONSTRATION
PURPOSES ONLY. METRO PUBLIC WORKS SHALL DECIDE
IF ANY PORTION OF THESE IMPROVEMENTS ARE TO BE
REMOVED AT ANY TIME. PROPOSED SIGNAL MODIFICATION
PLANS SHOULD ONLY BE IMPLEMENTED IF IMPROVEMENTS
REMAIN PERMANENT.



FILE NO:	891704370.13
DATE:	04/16/2021
DESIGNED BY:	JEG
DRAWN BY:	JEG
CHECKED BY:	JMC

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DATE:		



ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED IN FULL COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD, FEDERAL REGISTER 36 CFR PARTS 1190 AND 1191, ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES, ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES, PROPOSED RULE. PUBLISHED IN THE FEDERAL REGISTER ON JULY 23, 2004, AS HAS BEEN ADOPTED BY METRO.

ACCEPTED BY : _____

DATE : _____

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

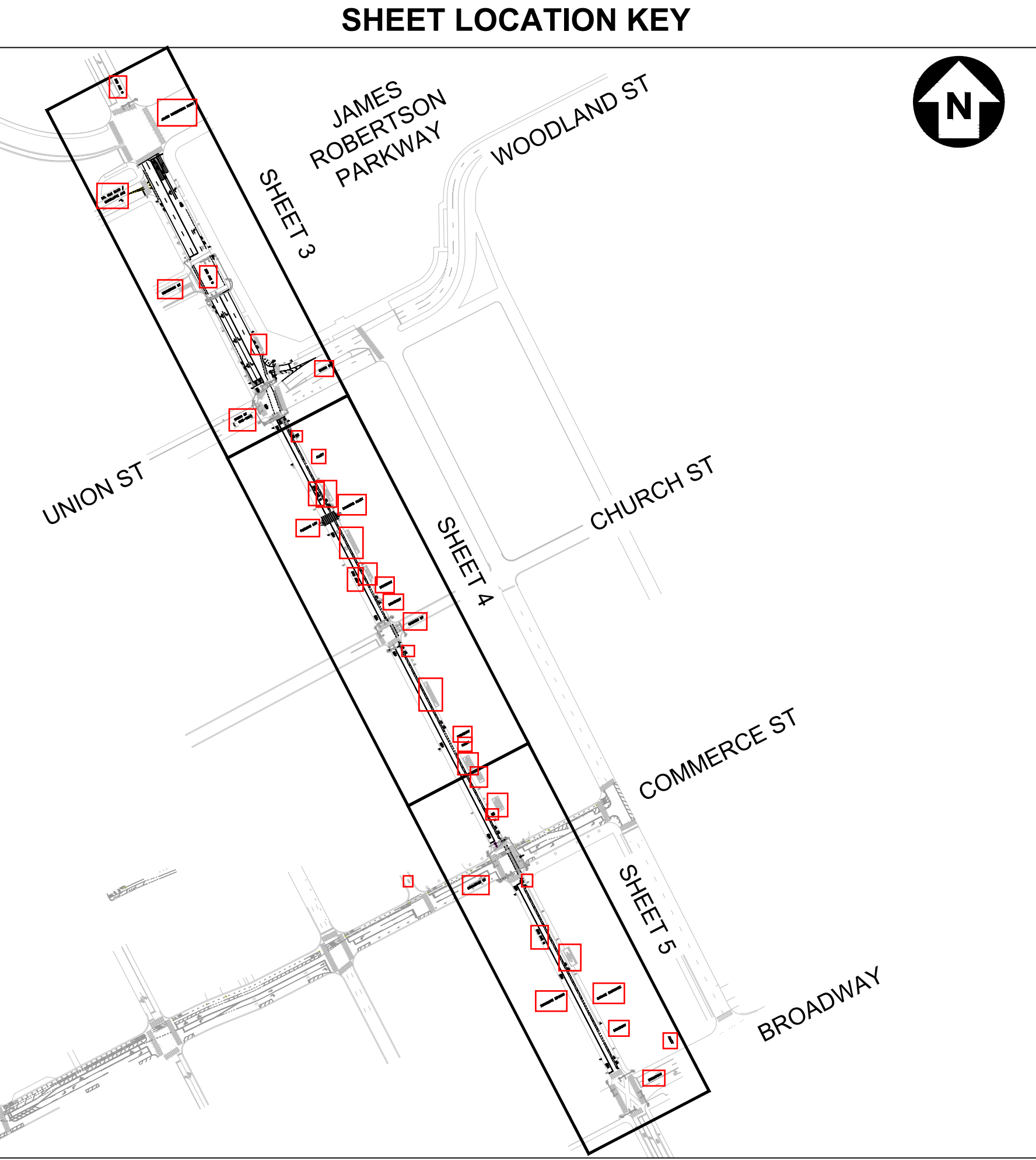
**3RD AVENUE N
BIKEWAY**

Title Sheet

SCALE: N.T.S.

SHEET 1

TRAFFIC DATA		
ROADWAY	LIMITS	MPH
3RD AVENUE N	FROM JAMES ROBERTSON PARKWAY TO BROADWAY	30
**SPECIAL NOTE(S): <ul style="list-style-type: none">ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.)CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ROADWAY MARKINGS AND SIGNS.BIKEWAY SIGNAGE SHALL BE PLACED PER DIRECTION OF FIELD ENGINEER.SHARROW AND BIKE LANE PAVEMENT MARKING SHALL BE PLACED PER DIRECTION OF FIELD ENGINEER.SHARROW AND BIKE LANE PAVEMENT MARKING SHALL NOT BE PLACED IN FRONT OF DRIVEWAYS.BIKEWAY PROJECT SHALL COORDINATE WITH METRO TRAFFIC DEPARTMENT.		



- FOOTNOTES**
- ITEM INCLUDES ALL EXCLUSIVE BIKE LANE STOP LINES.
 - BIKEWAY BUFFER PROTECTION MAY VARY, SUPPLIED BY METRO PUBLIC WORKS, ITEM & ASSOCIATED COST USED FOR ESTIMATION PURPOSES ONLY. SUGGESTED MANUFACTURER (PEXCO, DAVIDSON TRAFFIC CONTROL PRODUCTS) OR METRO APPROVED EQUIVALENT TO BE USED. SEE SHEET 2A FOR DETAILS.
 - ITEM INCLUDES 8" DYL ACROSS THE INTERSECTION OF 3RD AVENUE N AND UNION STREET.
 - METRO PUBLIC WORKS MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR SPRAY THERMOPLASTIC OR PAINT FOR APPLICABLE PAVEMENT MARKING ITEMS.
 - SOLID COLORED PAVEMENT (EXTRUDED THERMOPLASTIC WITH ENHANCED TRACTION ADDITIVES) SHALL BE REQUIRED FOR INTERSECTION CONFLICT PAVEMENT MARKINGS. SUGGESTED MANUFACTURER (ENNIS-FLINT) OR METRO APPROVED EQUIVALENT TO BE USED. SEE SHEET 2A FOR DETAILS.
 - ALL EXISTING CONFLICTING PAVEMENT MARKINGS TO BE REMOVED ON 3RD AVENUE NORTH WITHIN PROJECT LIMITS.
 - ITEM INCLUDES 6" BICYCLE SYBMOLE W/ RIDER TO BE INSTALLED WITHIN THE BIKE BOX LOCATIONS AS SPECIFIED ON THE PLANS.
 - ITEM INCLUDES BARRIER LINE MARKINGS AND CORNER RADIUS MARKINGS FOR THE URBAN SMART CHANNEL LAYOUT AT THE INTERSECTION OF UNION AVENUE AND 3RD AVENUE N. SEE SHEET 3 FOR DETAILS.
 - ITEM TO BE INSTALLED WITHIN THE BIKEWAY BUFFER AT SIGNALIZED INTERSECTIONS AS SPECIFIED ON THE PLANS. SUGGESTED MANUFACTURER (IMPACT RECOVERY SYSTEMS) OR METRO APPROVED EQUIVALENT TO BE USED. SEE SHEET 2B FOR DETAILS.
 - SYBMOL PAVEMENT MARKINGS SHALL NOT BE PLACED IN FRONT OF DRIVEWAYS AND SHALL BE PLACED PER DIRECTION OF FIELD ENGINEER IF LOCATIONS SPECIFIED ON THE PLANS CONFLICT WITH EXISTING FIELD CONDITIONS.
 - SIGN SIZE TO BE 30" X 30".
 - SIGN SIZE TO BE 12" X 18".
 - SIGN FACE BACKGROUND TO BE FLUORESCENT YELLOW-GREEN.
 - SIGN SIZE TO BE 24" X 12".
 - SIGN SIZE TO BE 36" X 30".
 - SIGN SIZE TO BE 30" X 48".
 - SIGN SIZE TO BE 12" X 9".
 - IF COMBINED WITH ADDITIONAL PLAQUE, SIGNS TO BE ON A SINGLE FLAT ALUMINUM SHEET WITH A TOTAL SIZE OF 24" X 42".
 - IF COMBINED WITH ADDITIONAL PLAQUE, SIGNS TO BE ON A SINGLE FLAT ALUMINUM SHEET WITH A TOTAL SIZE OF 30" X 42".

3RD AVENUE NORTH - ESTIMATED PAVEMENT MARKING QUANTITIES			
ITEM #	DESCRIPTION	UNIT	QUANTITY
712-01.52	TRAFFIC CONTROL WITH POLICE	HOURL	240
(4) 716-02.01	PLASTIC PAVEMENT MARKING (4" LINE - ROADWAY)	L.M.	0.80
(4) 716-02.01	PLASTIC PAVEMENT MARKING (4" LINE - BIKE LANE)	L.M.	0.30
(8) 716-02.04	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	10
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	200
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	7
(3) 716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	25
716-02.09	PLASTIC PAVEMENT MARKING (CROSS-WALK - LONGITUDINAL BAR STYLE)	L.F.	35
(4) 716-02.10	PLASTIC PAVEMENT MARKING (6" LINE - BIKE LANE)	L.M.	0.40
716-02.10 BZ	PLASTIC PAVEMENT MARKING (6" LINE - BUFFER ZONE)	L.M.	0.10
(4) 716-02.11	PLASTIC PAVEMENT MARKING (6" DOTTED LINE - 2' LINE W/ 4' SKIP - BIKE LANE)	L.M.	0.05
(1) (4) 716-02.12	PLASTIC PAVEMENT MARKING (8" LINE - BIKE LANE)	L.M.	0.10
(4) 716-02.36	PLASTIC PAVEMENT MARKING (90mil 8" DETAIL WORK - LOADING ZONES, ISLAND MARKINGS, BULBOUTS, ETC.)	L.F.	300
716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	2
716-03.07	PLASTIC WORD PAVEMENT MARKING (STOP)	EACH	1
716-03.08	PLASTIC WORD PAVEMENT MARKING (PED-XING - WALKMAN PED LEGEND)	EACH	2
716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	5
716-04.03	PLASTIC PAVEMENT MARKING (4" DOTTED LINE - 2' LINE W/ 4' SKIP - ROADWAY)	L.F.	10
716-04.03	PLASTIC PAVEMENT MARKING (4" DOTTED LINE - 2' LINE W/ 4' SKIP - BIKE LANE)	L.F.	50
(7) 716-04.11	PLASTIC PAVEMENT MARKING (BICYCLE W/ HELMETED RIDER SYMBOL ONLY)	EACH	5
(10) 716-04.13 HR	PLASTIC PAVEMENT MARKING (BICYCLE W/ HELMETED RIDER SYMBOL & DIRECTIONAL ARROW)	EACH	15
(5) 716-04.20	GREEN TEXTURED BIKE LANE (EXTRUDED THERMOPLASTIC)	S.Y.	350
(10) 716-04.24	PLASTIC PAVEMENT MARKING-BIKE SYMBOL/ARROW - "SHARROW ON GREEN BACKGROUND"	EACH	12
(6) 716-08.01	REMOVAL OF PAVEMENT MARKING (4" LINE)	L.F.	4200
(6) 716-08.01	REMOVAL OF PAVEMENT MARKING (4" LINE - PARKING)	L.F.	80
(6) 716-08.02	REMOVAL OF PAVEMENT MARKING (8" BARRIER LINE)	L.F.	85
(6) 716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	220
(6) 716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	5
(6) 716-08.07	REMOVAL OF PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	5
(6) 716-08.09	REMOVAL OF PAVEMENT MARKING (4" DOTTED LINE)	L.F.	70
(9) 920-19.05	INSTALLATION OF METRO SUPPLIED TUFF CURB XLP W/ TUBULAR MARKER	EACH	12
(2) 920-11.04	FG 300 SURFACE MOUNT CHANNELIZER POST, MODEL EFX, UR, PE, WITH METRO BASE (PEXCO)	EACH	74

3RD AVENUE NORTH - ESTIMATED ROADWAY QUANTITIES			
ITEM #	DESCRIPTION	UNIT	QUANTITY
202-03.04	REMOVE SIDEWALK (CONCRETE)	S.Y.	15
202-03.05	REMOVE CONCRETE DRIVE (6" TO 8")	S.Y.	50
303-01	MINERAL AGGREGATE, TYPE A, GRADING D	TON	1
701-01.01	CONCRETE SIDEWALK (4")	S.F.	25
701-02.01	CONCRETE CURB RAMP-6"	S.F.	200
701-02.01	CONC. DRIVEWAY-6"	S.F.	50
713-15.36	REMOVE SIGN, SUPPORT, & FOOTING	EACH	16
(11)(13) 713-16.21	SIGNS (36" X 36" ALUMINUM FLAT SHEET, R10-15R, TURNING VEHICLES YIELD TO BIKE/PED, RIGHT)	EACH	2
(15) 713-16.21	SIGNS (36" X 36" ALUMINUM FLAT SHEET, R4-4, BEGIN RIGHT TURN LANE YIELD TO BIKES)	EACH	1
(18) 713-16.22	SIGNS (24" X 30" ALUMINUM FLAT SHEET, R10-6a, STOP HERE ON RED WITH ARROW)	EACH	3
(16) 713-16.25	SIGNS (48" X 48" ALUMINUM FLAT SHEET, R3-8 MOD. ADVANCE INTERSECTION LANE CONTROL MODIFIED WITH BIKE LANE)	EACH	1
(18) 713-16.27	SIGNS (24" X 12" ALUMINUM FLAT SHEET, R3-7bP, EXCEPT BICYCLES PLAQUE)	EACH	2
(19) 713-16.27	SIGNS (24" X 12" ALUMINUM FLAT SHEET, R3-7bP MOD., EXCEPT BICYCLES OVERSIZE PLAQUE)	EACH	1
(17) 713-16.30	SIGNS (12" X 36" ALUMINUM FLAT SHEET, M6-3, DIRECTIONAL ARROW STRAIGHT)	EACH	1
713-16.31	SIGNS (24" X 18" ALUMINUM FLAT SHEET, R3-17, BIKE LANE)	EACH	5
(13)(14) 713-16.31	SIGNS (24" X 18" ALUMINUM FLAT SHEET, W16-9P, AHEAD PLAQUE)	EACH	2
(13)(14) 713-16.31	SIGNS (24" X 18" ALUMINUM FLAT SHEET, W16-18P, NOTICE PLAQUE)	EACH	5
(12) 713-16.31	SIGNS (24" X 18" ALUMINUM FLAT SHEET, R9-5, BIKES USE PED SIGNAL)	EACH	2
(19) 713-16.33	SIGNS (30" X 36" ALUMINUM FLAT SHEET, R10-11a, NO TURN ON RED)	EACH	1
(11)(13) 713-16.33	SIGNS (30" X 36" ALUMINUM FLAT SHEET, W11-2, PEDESTRIAN)	EACH	2
(11) 713-16.33	SIGNS (30" X 36" ALUMINUM FLAT SHEET, R1-1, STOP)	EACH	1
(11) 713-16.33	SIGNS (30" X 36" ALUMINUM FLAT SHEET, R4-11, BIKES MAY USE FULL LANE)	EACH	5
PW-DW-001	DETECTABLE WARNINGS (SPECIFICATION 02523) (ST-329, ST-330)	S.F.	20

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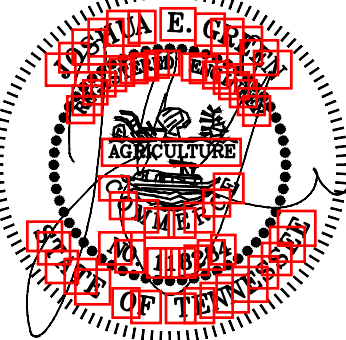

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CHECKED BY: JMC

REVISION BLOCK

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04/16/2021

METROPOLITAN GOVERNMENT

OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE

PUBLIC WORKS DEPARTMENT

ENGINEERING DIVISION

3RD AVENUE N

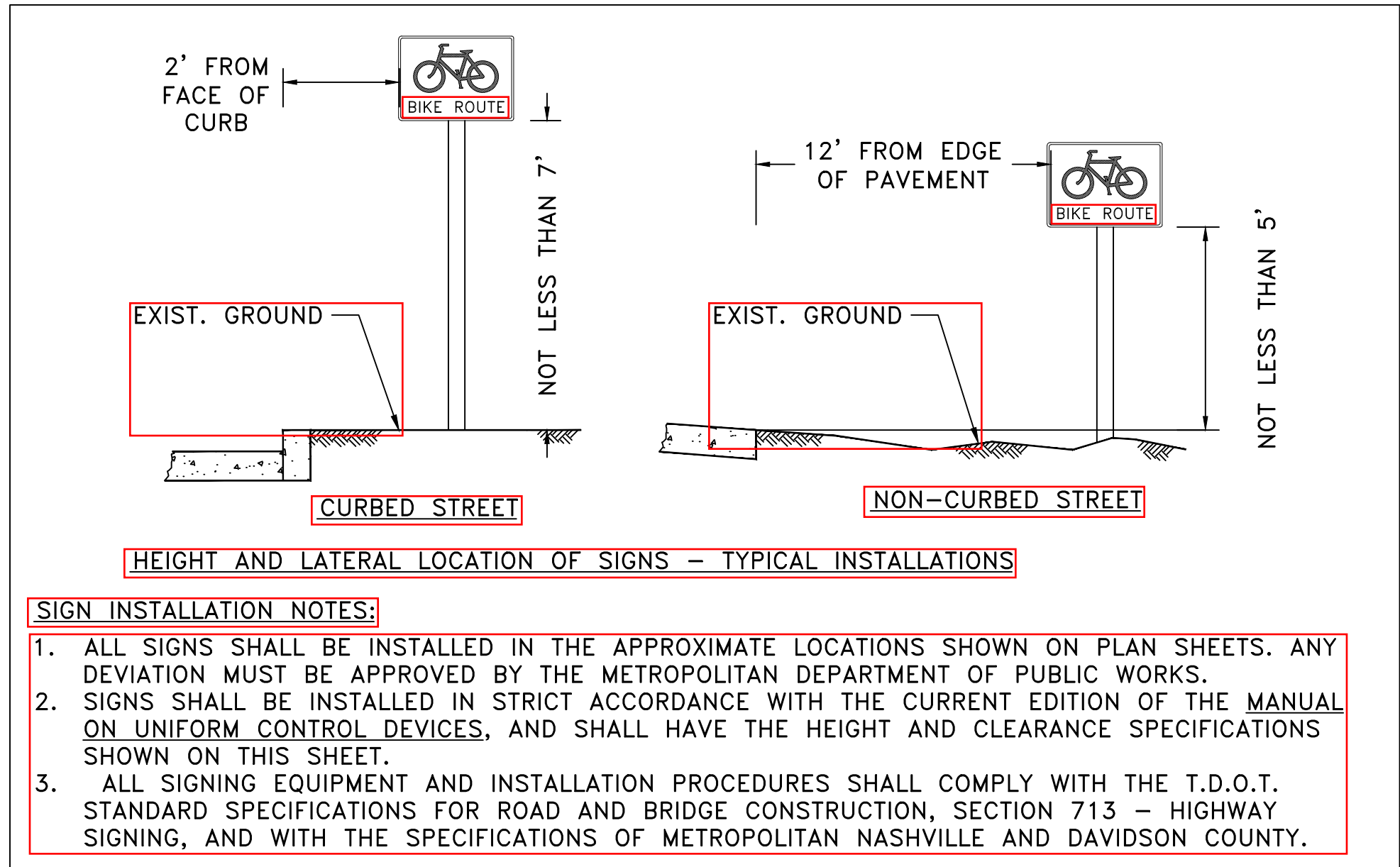
BIKEWAY

Estimated Quantities

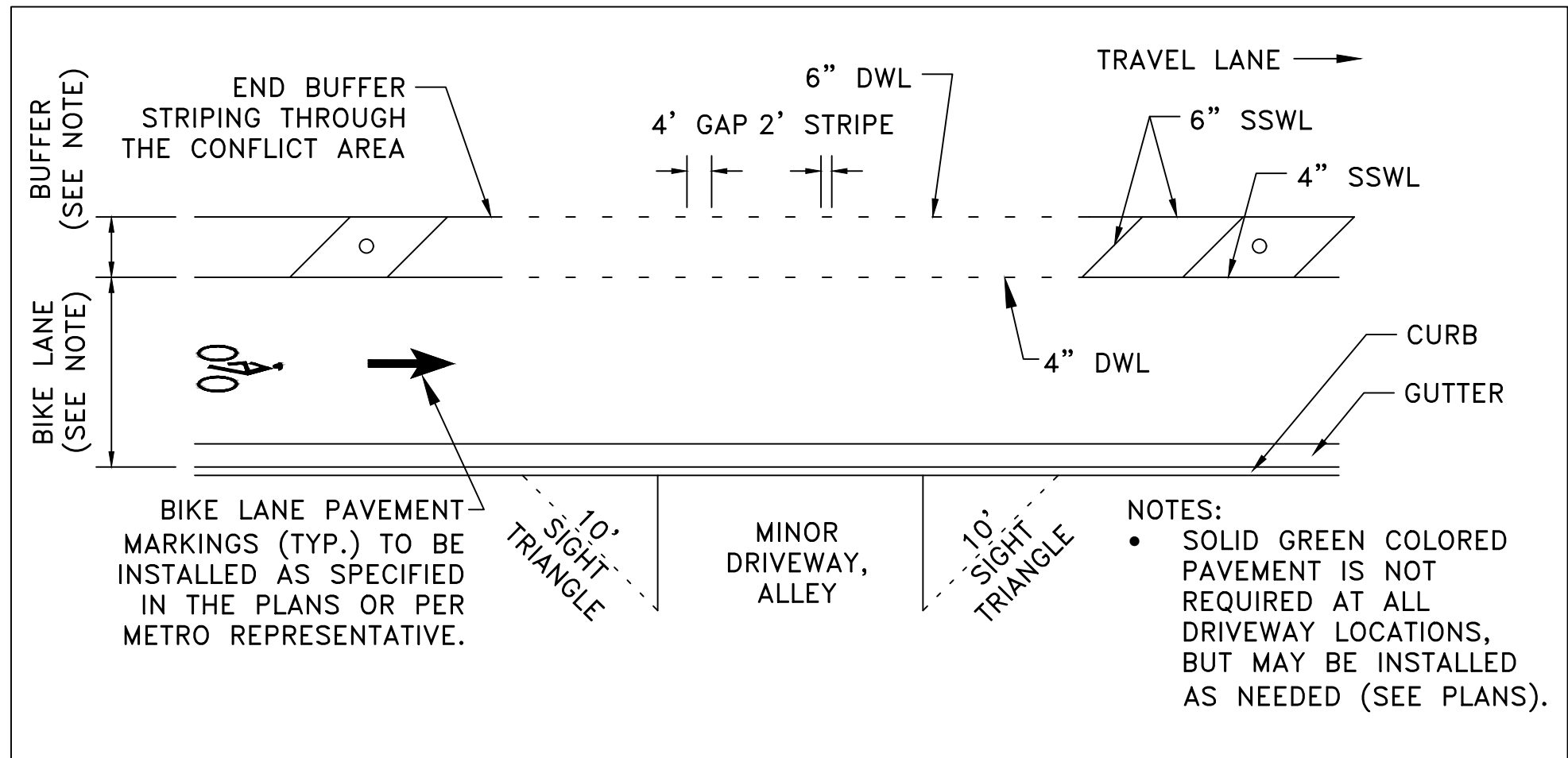
and Sign Schedule

SCALE: N.T.S.

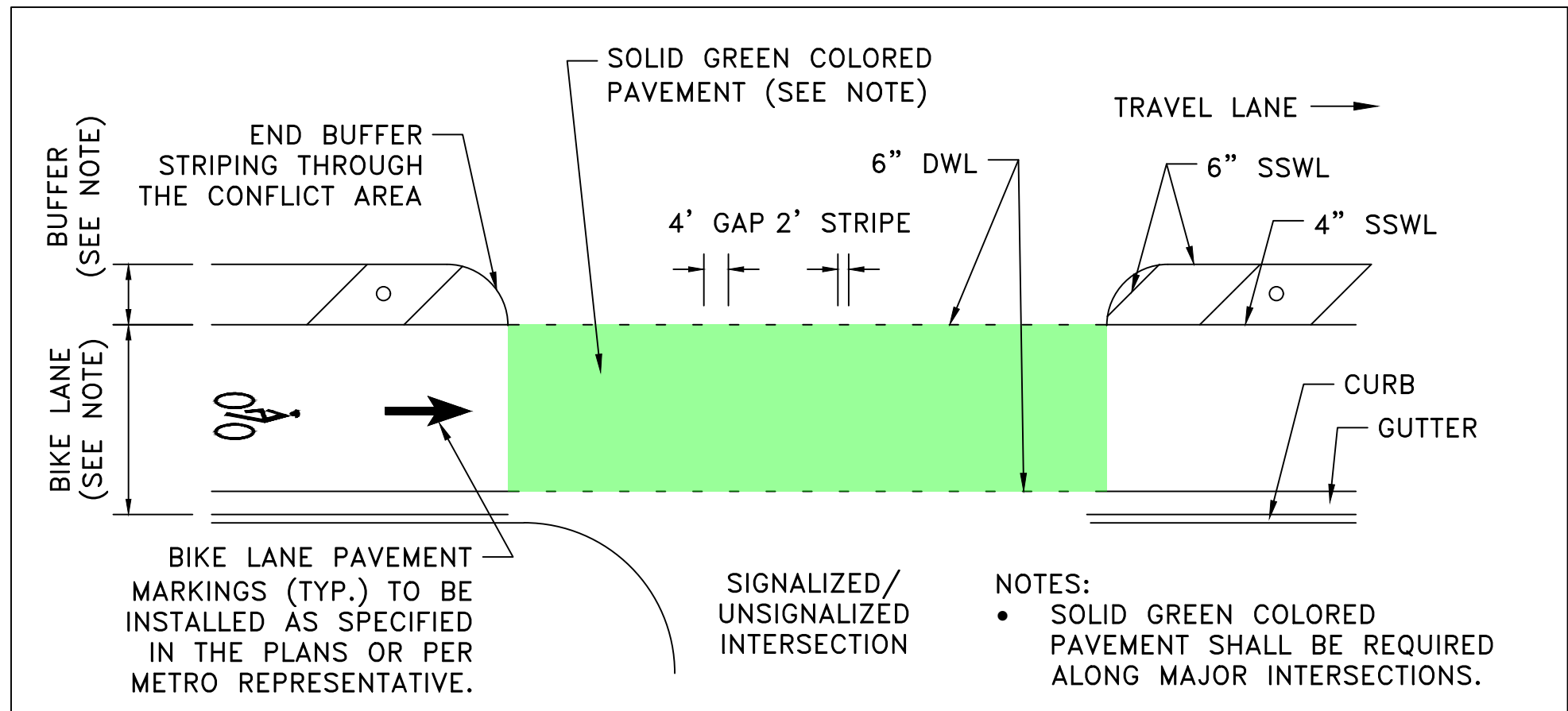
SHEET 2



HEIGHT AND LATERAL LOCATION OF SIGNS – TYPICAL INSTALLATION
N.T.S.

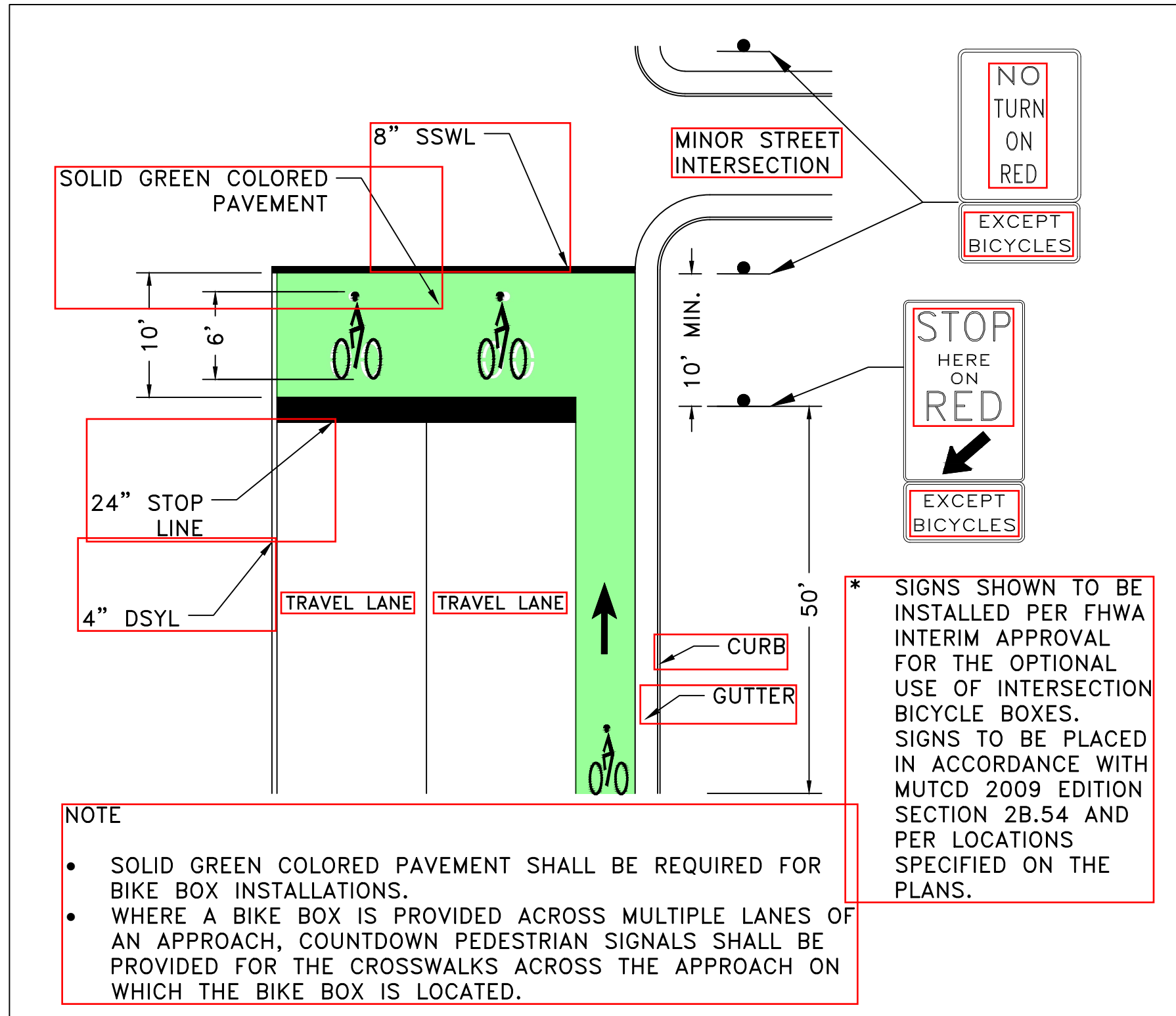


SITE TRIANGLE & BIKE CONFLICT LINE DETAIL AT DRIVEWAYS
N.T.S.

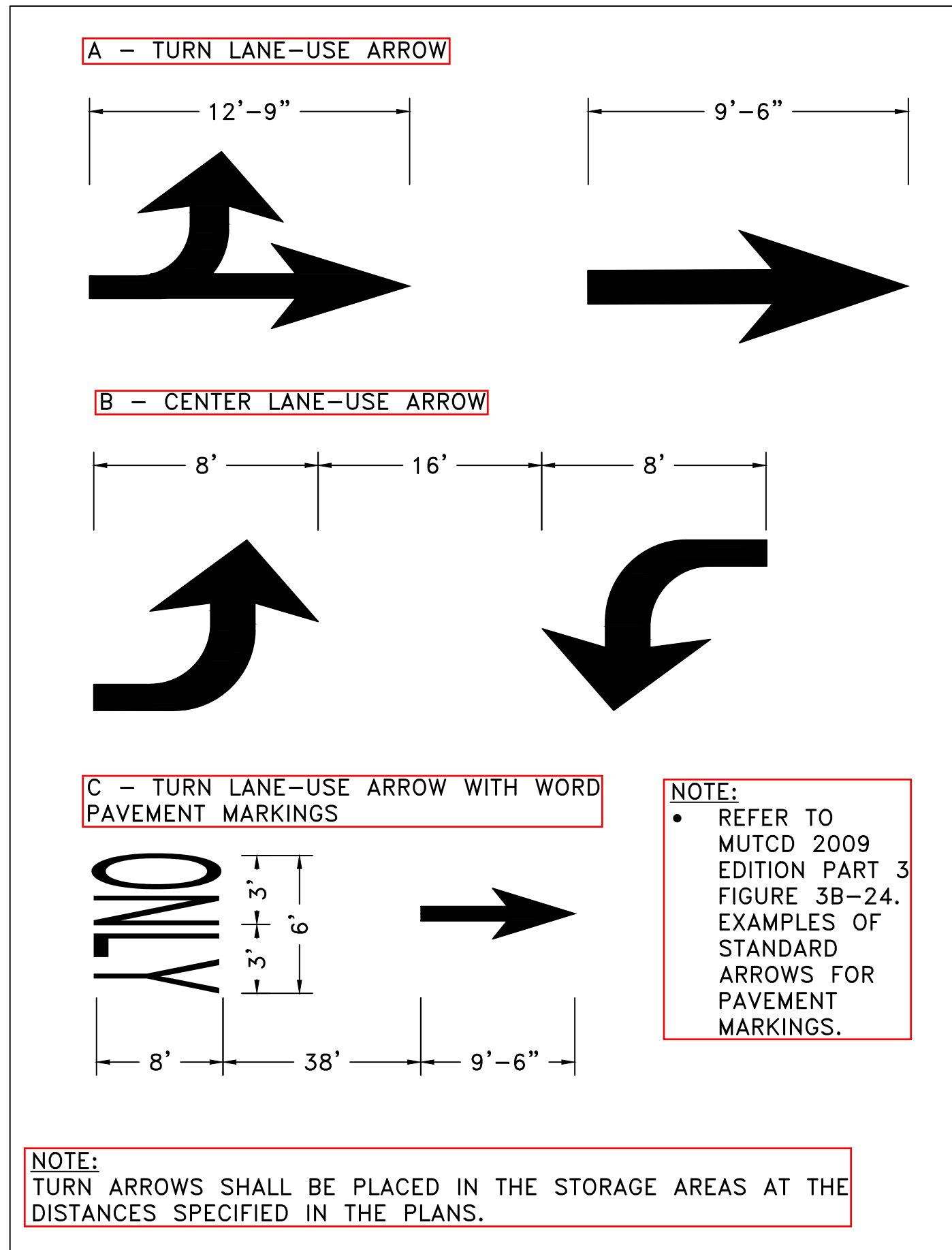


BIKE CONFLICT LINE AT INTERSECTIONS
N.T.S.

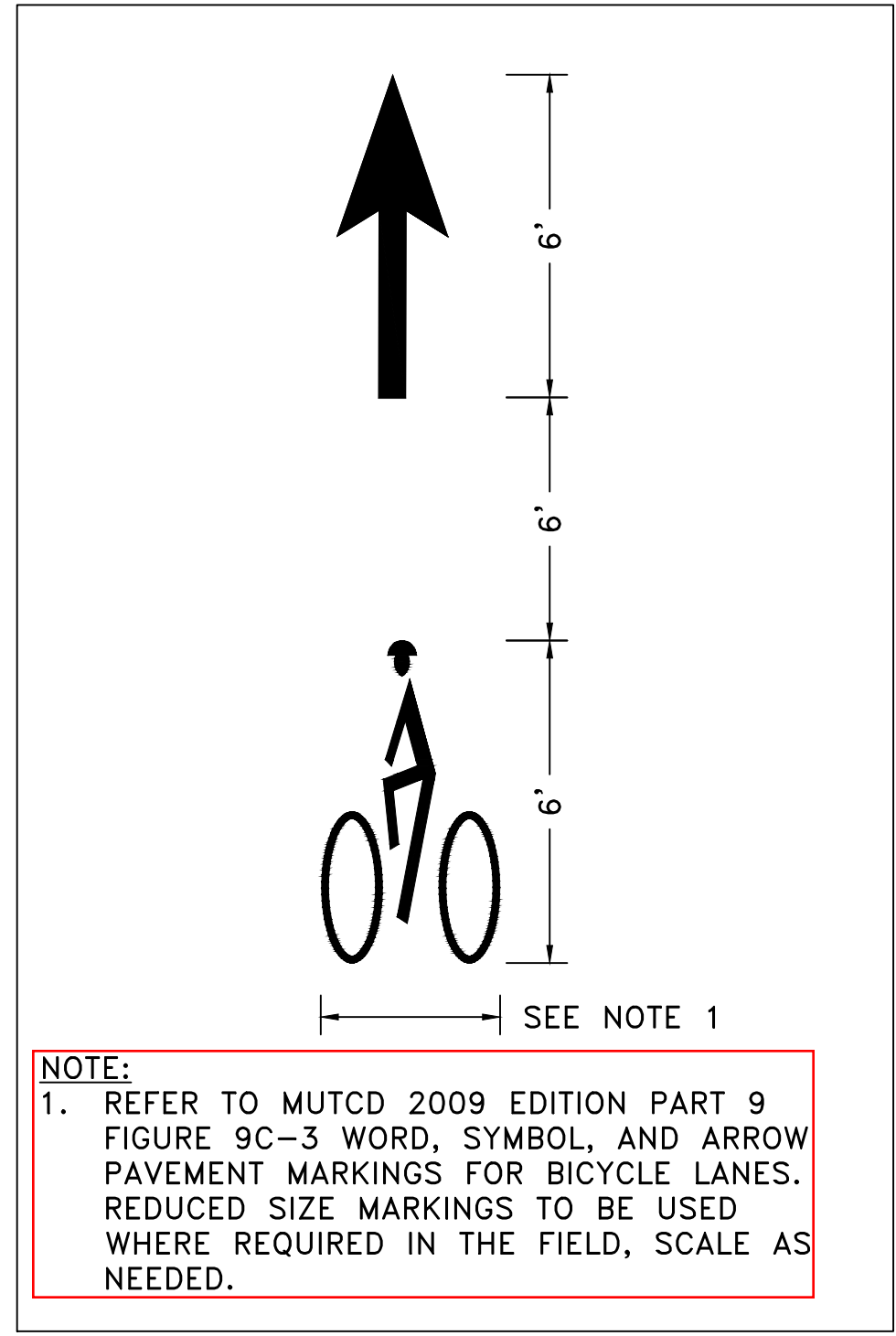
- NOTES:
- BIKE LANE WIDTH AND BUFFER WIDTH SPECIFIED ON THE PLANS. BIKE LANE WIDTH DIMENSION SHOWN ON THE PLANS INCLUDES THE EXIST. GUTTER PAN.
 - 36" WHITE FLEXIBLE DELINEATOR POSTS TO BE INSTALLED WITHIN THE BUFFER AT 20' SPACING CONTRACTOR TO COORDINATE WITH MPW PRIOR TO INSTALLATION.



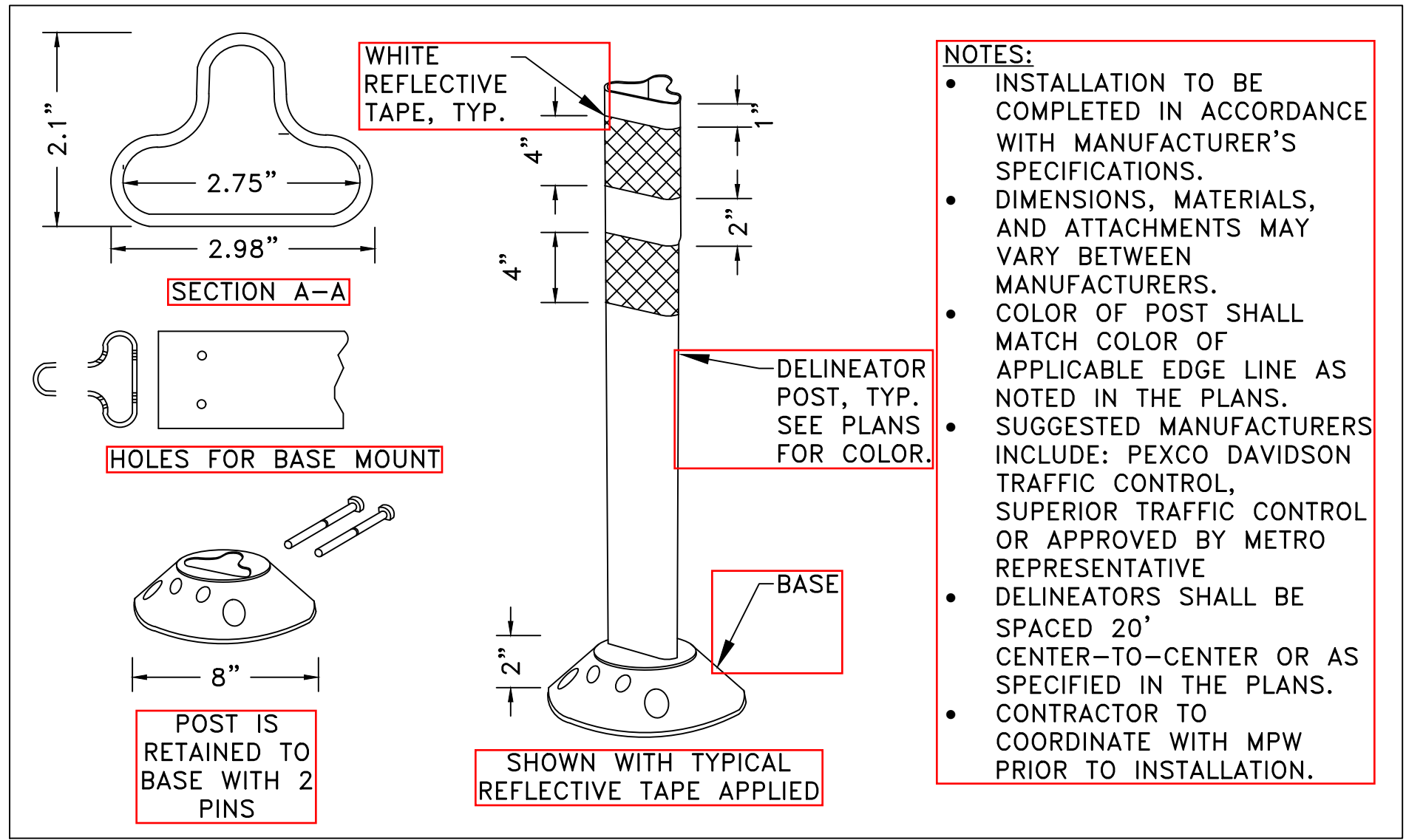
BIKE BOX DETAIL
N.T.S.



TURN LANE ARROW DETAIL
N.T.S.

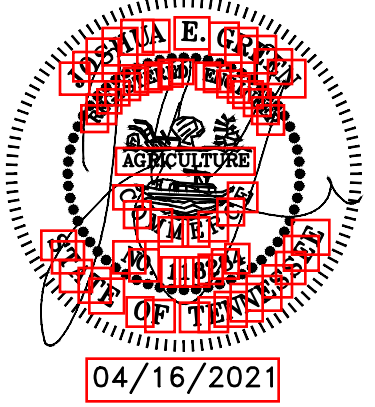


BIKE LANE PAVEMENT MARKING DETAIL
N.T.S.



36" FLEXIBLE DELINEATOR POST DETAIL
N.T.S.

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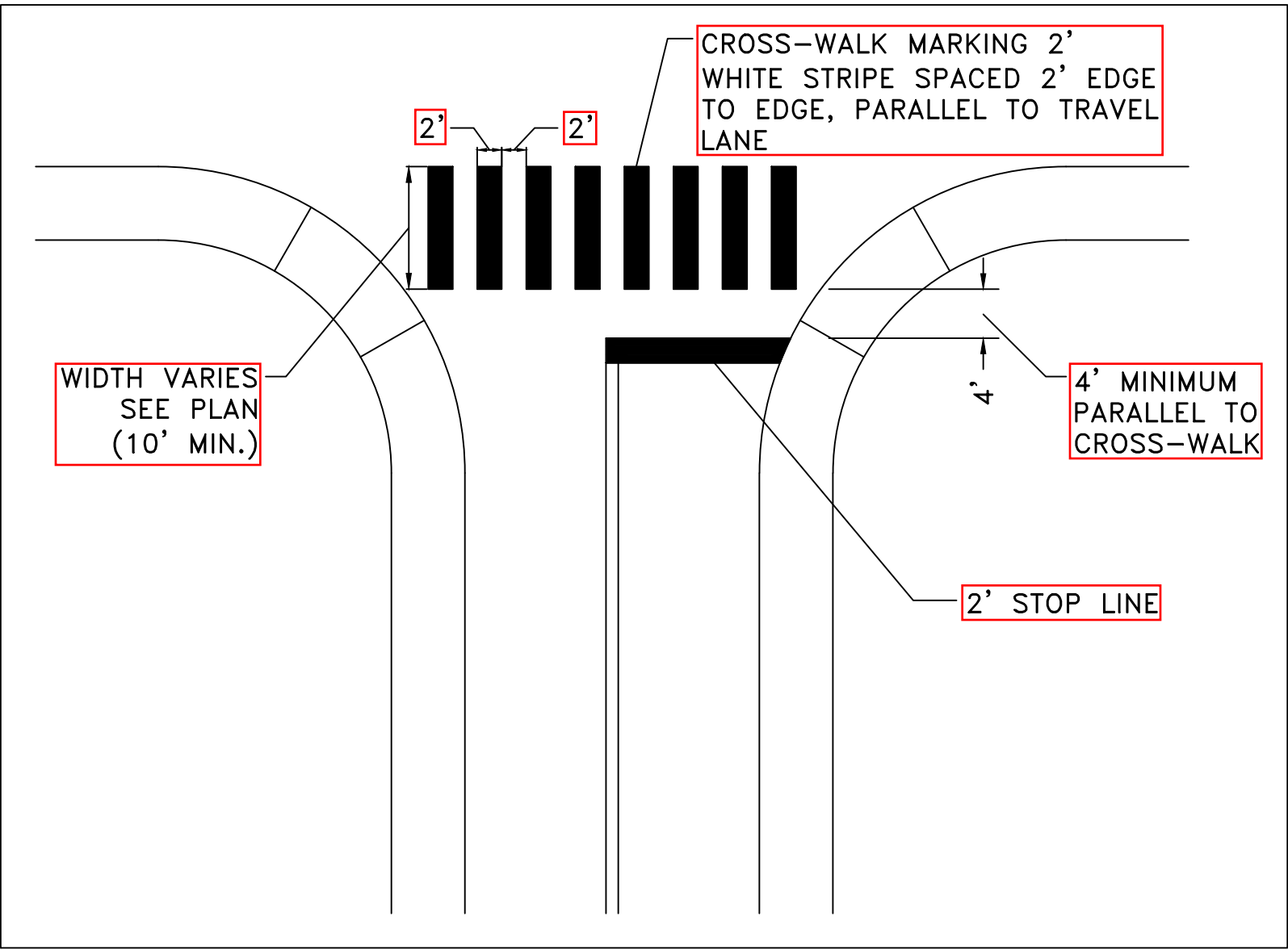
3RD AVENUE N
BIKEWAY

Detail Sheet

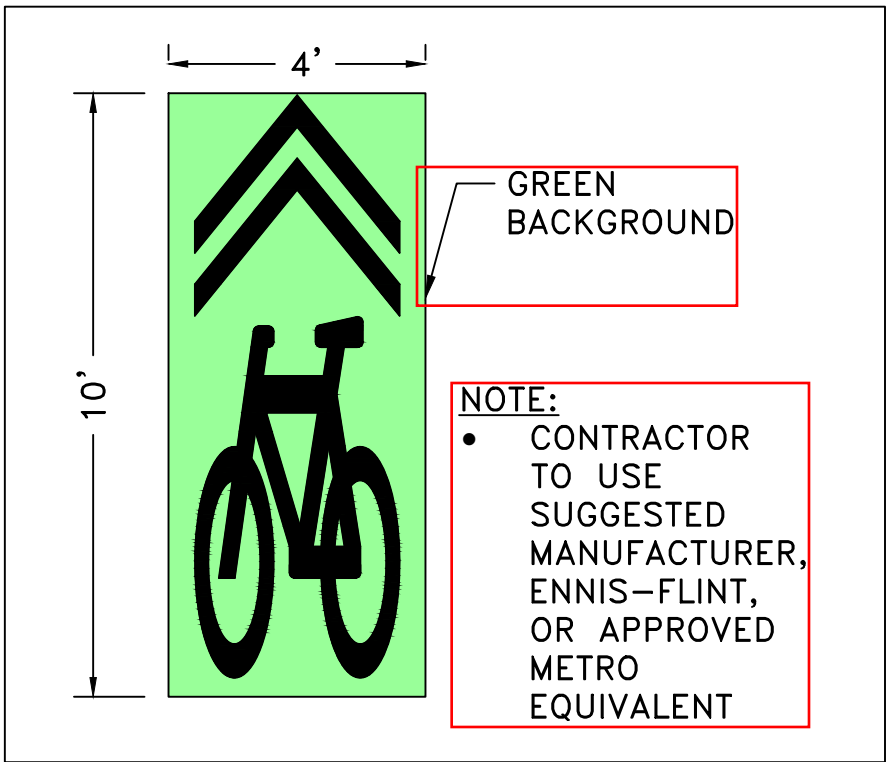
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SHEET 2A

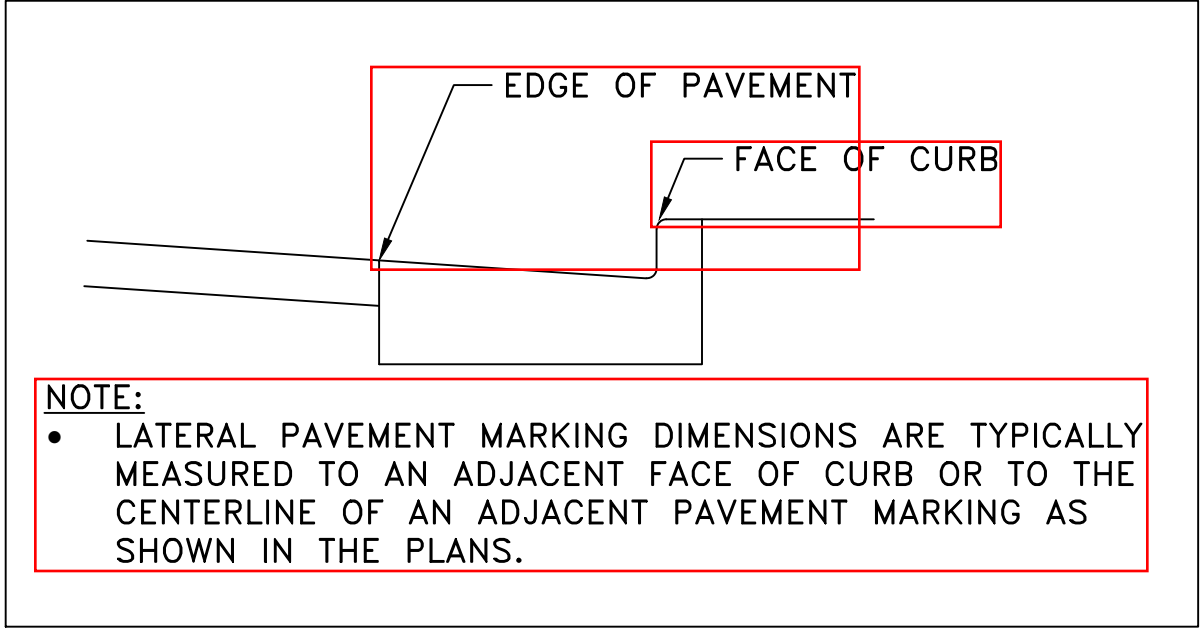
SIGN SCHEDULE						
DESCRIPTION		NO.	SIZE	SIGN ID	S.F.	POST TYPE
S1		1	30 " x 48 "	R3-8 (MOD.)	10	P8
S2		5	12 " x 18 "	R9-5	7.5	
S3		1	12 " x 9 "	M6-3	0.75	
S4		3	24 " x 30 "	R10-6a	15	P8
S19		2	24 " x 12 "	R3-7bP	4	
S5		5	30 " x 36 "	R10-11a	37.5	P8
S6		5	30 " x 12 "	R3-7bP (MOD.)	12.5	
S7		7	30 " x 30 "	R10-15R	43.75	
S8		1	30 " x 30 "	R1-1	5.18	P8
S9		2	30 " x 30 "	W11-2	12.5	P8
S10	NOT USED					
S11		2	24 " x 12 "	W16-9P	4	
S12		5	24 " x 12 "	W16-18P	10	
S13		5	30 " x 30 "	R4-11	31.25	P8
S14		5	24 " x 18 "	R3-17	15	U3
S15		1	36 " x 30 "	R4-4	7.5	P8
S16		1	12 " x 18 "	R10-10b	1.5	
TOTALS		51			217.93	



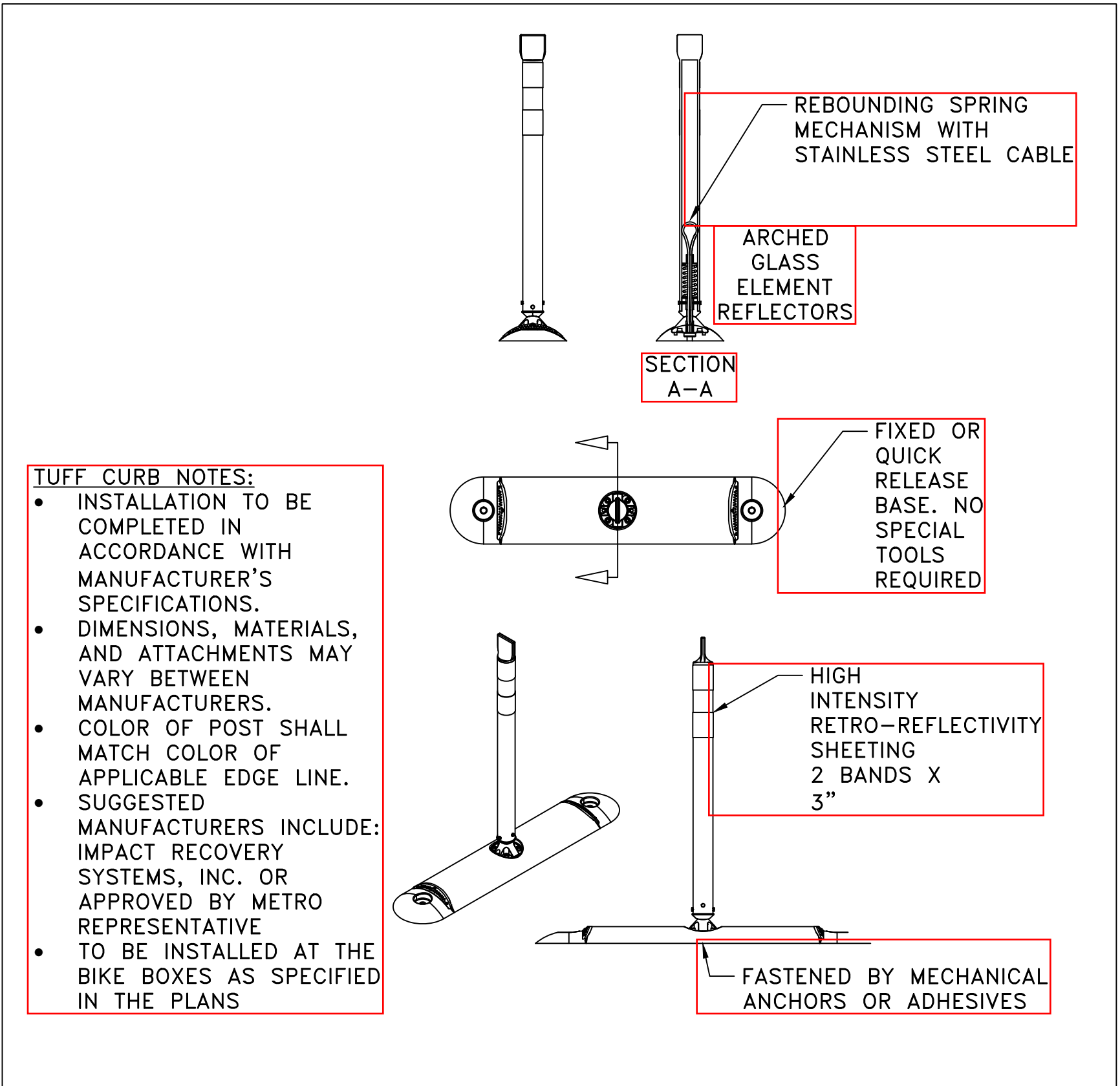
TYPICAL STOP LINE PLACEMENT AND CROSS-WALK MARKINGS
N.T.S.



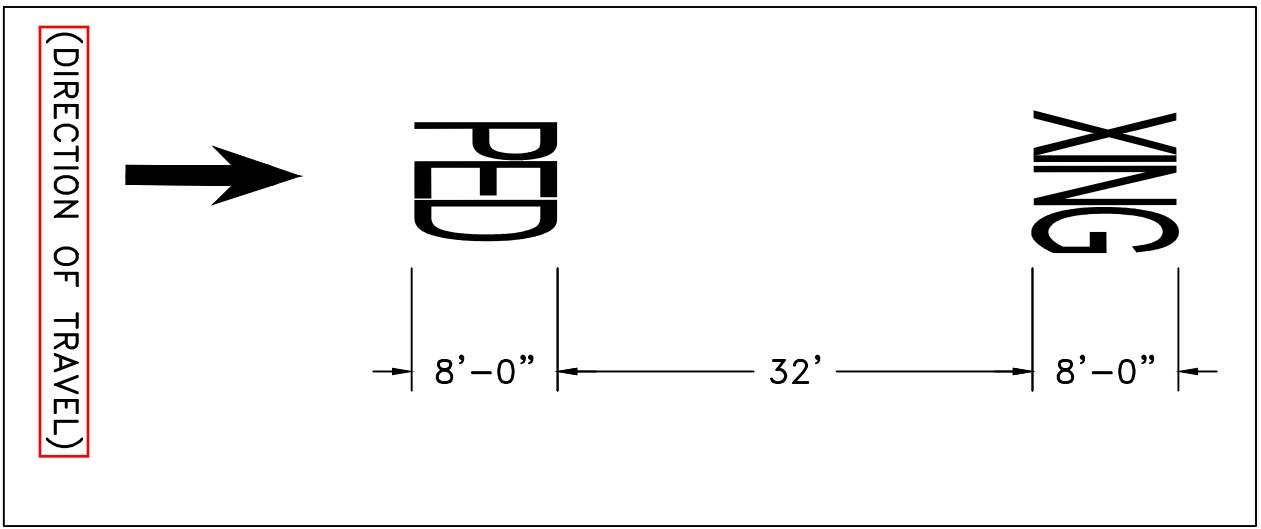
SHARROW W/ GREEN BACKGROUND PAVEMENT MARKING DETAIL
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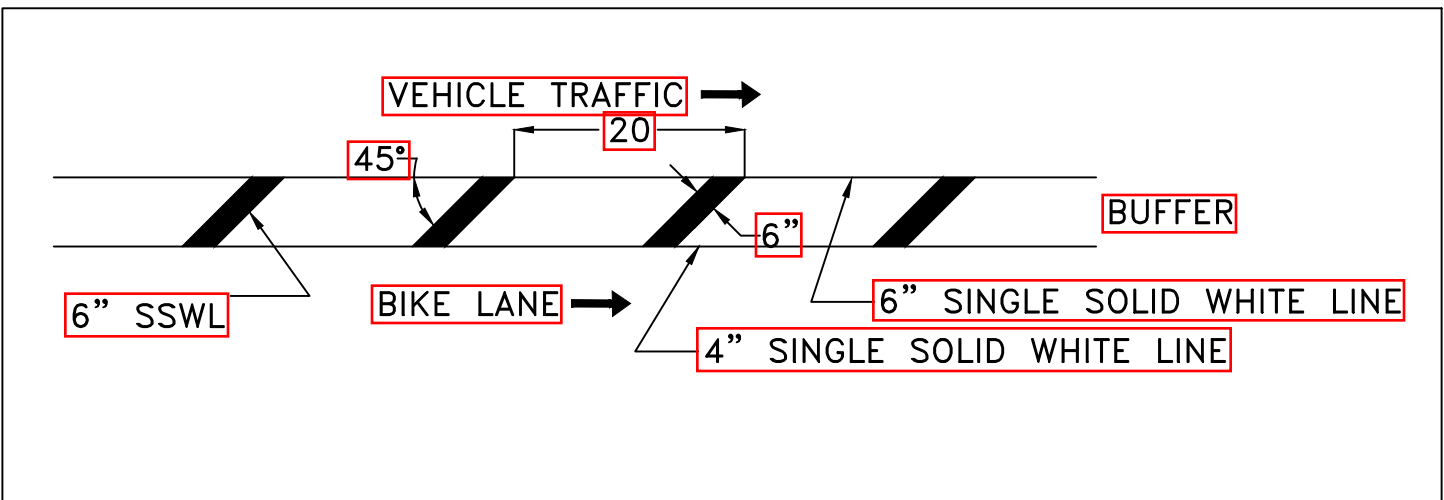
TYPICAL LATERAL STRIPING DIMENSIONS
N.T.S.



TUFF CURB XLP WITH TUBULAR MARKER DETAIL
N.T.S.



WORD PAVEMENT MARKING DETAIL
N.T.S.



BIKE LANE BUFFER PAVEMENT MARKINGS
N.T.S.

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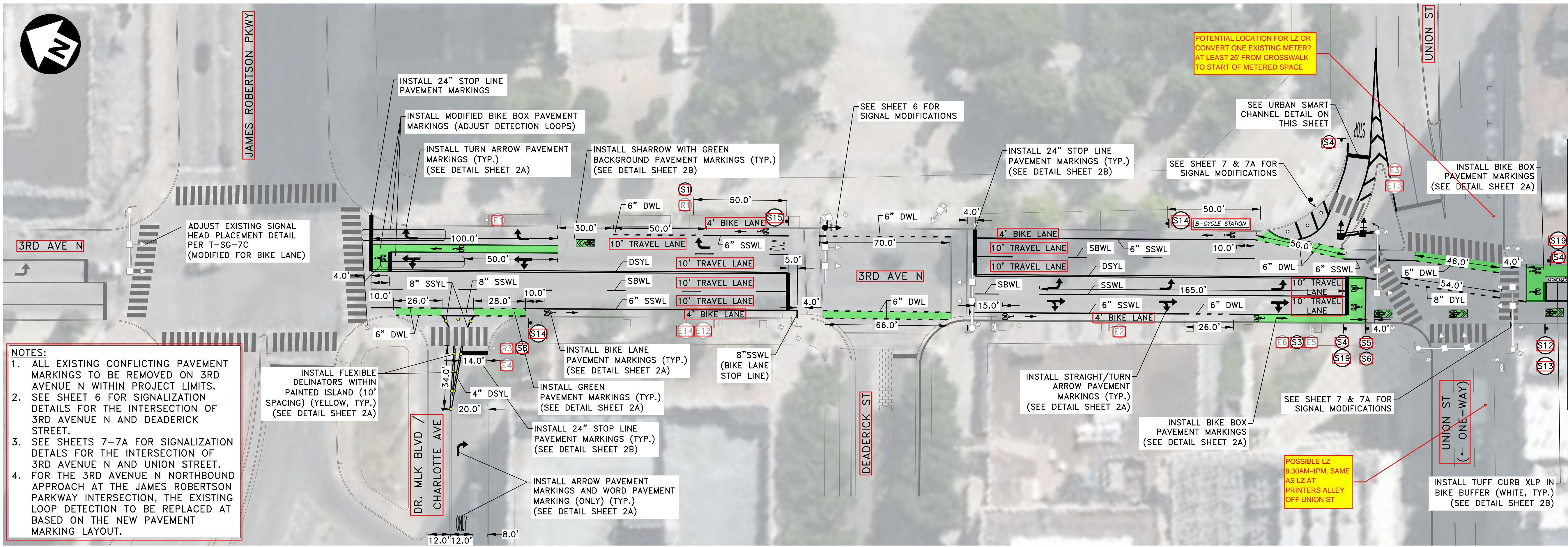
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3RD AVENUE N
BIKEWAY

Detail Sheet

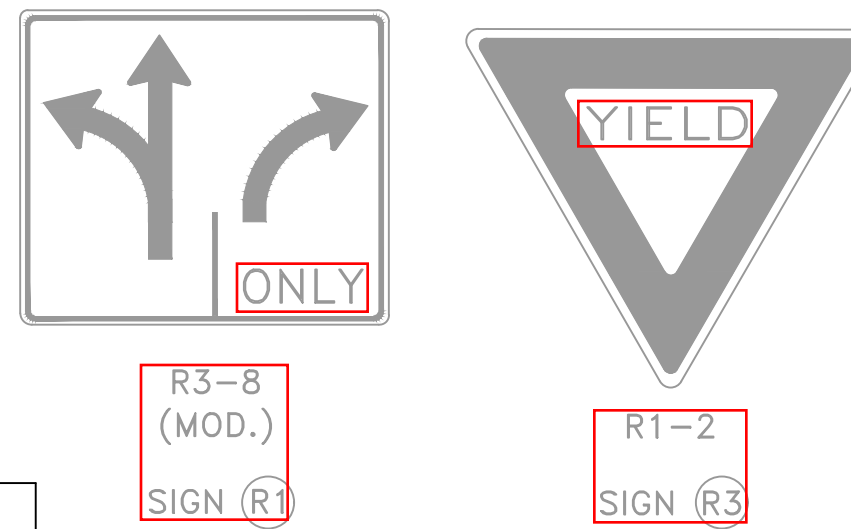
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SHEET 2B

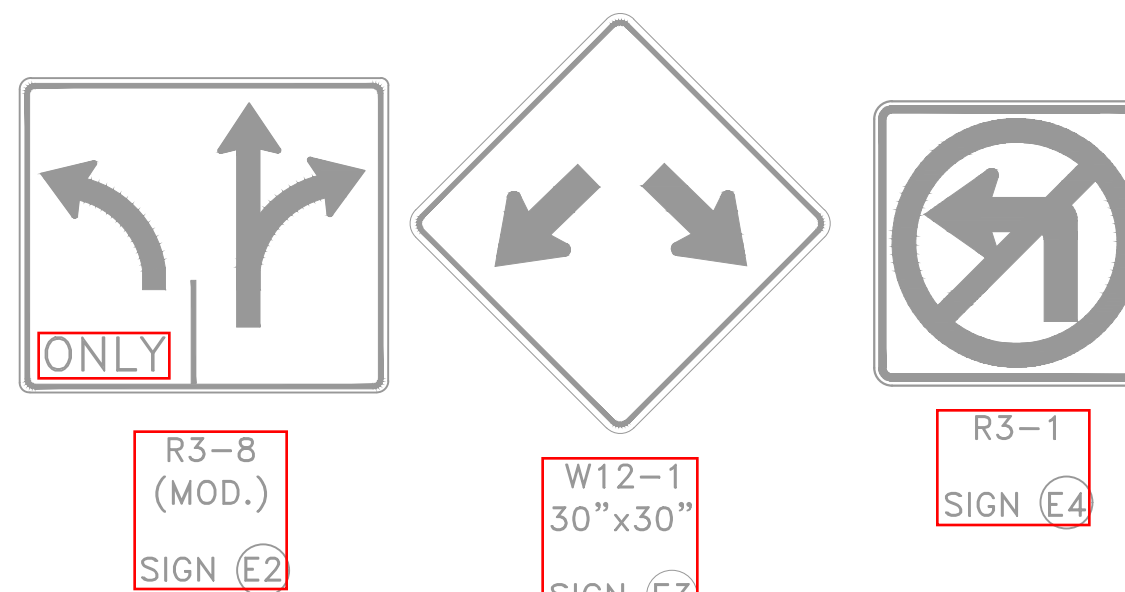


- NOTES:**
1. ALL EXISTING CONFLICTING PAVEMENT MARKINGS TO BE REMOVED ON 3RD AVENUE N WITHIN PROJECT LIMITS.
 2. SEE SHEET 6 FOR SIGNALIZATION DETAILS FOR THE INTERSECTION OF 3RD AVENUE N AND UNION STREET.
 3. SEE SHEETS 7-7A FOR SIGNALIZATION DETAILS FOR THE INTERSECTION OF 3RD AVENUE N AND DEADERICK STREET.
 4. FOR THE 3RD AVENUE N NORTHBOUND APPROACH AT THE JAMES ROBERTSON PARKWAY INTERSECTION, THE EXISTING LOOP DETECTION TO BE REPLACED AT BASED ON THE NEW PAVEMENT MARKING LAYOUT.

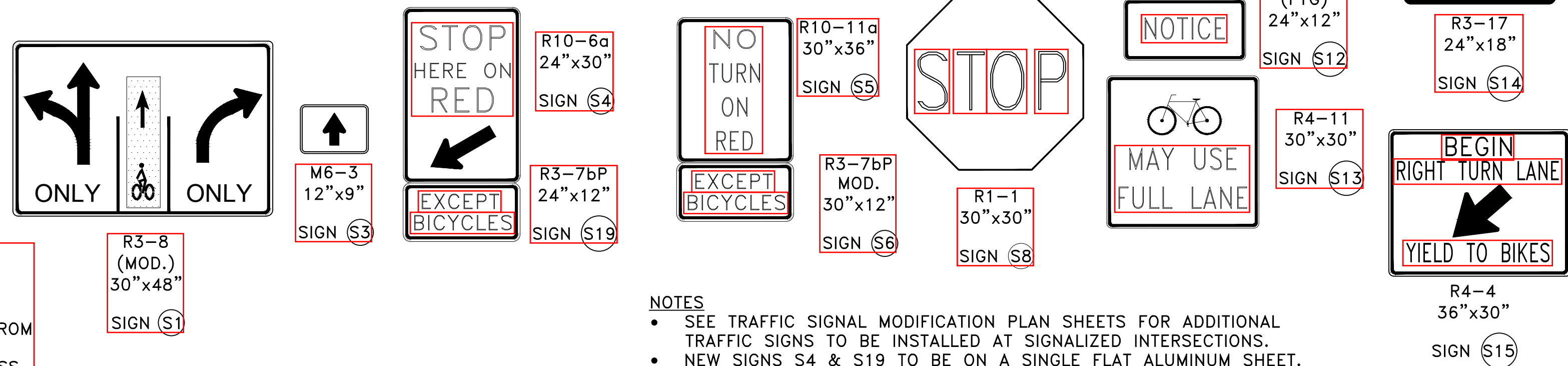
**TRAFFIC SIGNS
(EXISTING TO BE REMOVED)**



**TRAFFIC SIGNS
(EXISTING TO REMAIN)**



**TRAFFIC SIGNS
(NEW)**



- NOTES**
- SEE TRAFFIC SIGNAL MODIFICATION PLAN SHEETS FOR ADDITIONAL TRAFFIC SIGNS TO BE INSTALLED AT SIGNALIZED INTERSECTIONS.
 - NEW SIGNS S4 & S19 TO BE ON A SINGLE FLAT ALUMINUM SHEET.
 - NEW SIGNS S5 & S6 TO BE ON A SINGLE FLAT ALUMINUM SHEET.

MARKING ABBREVIATIONS

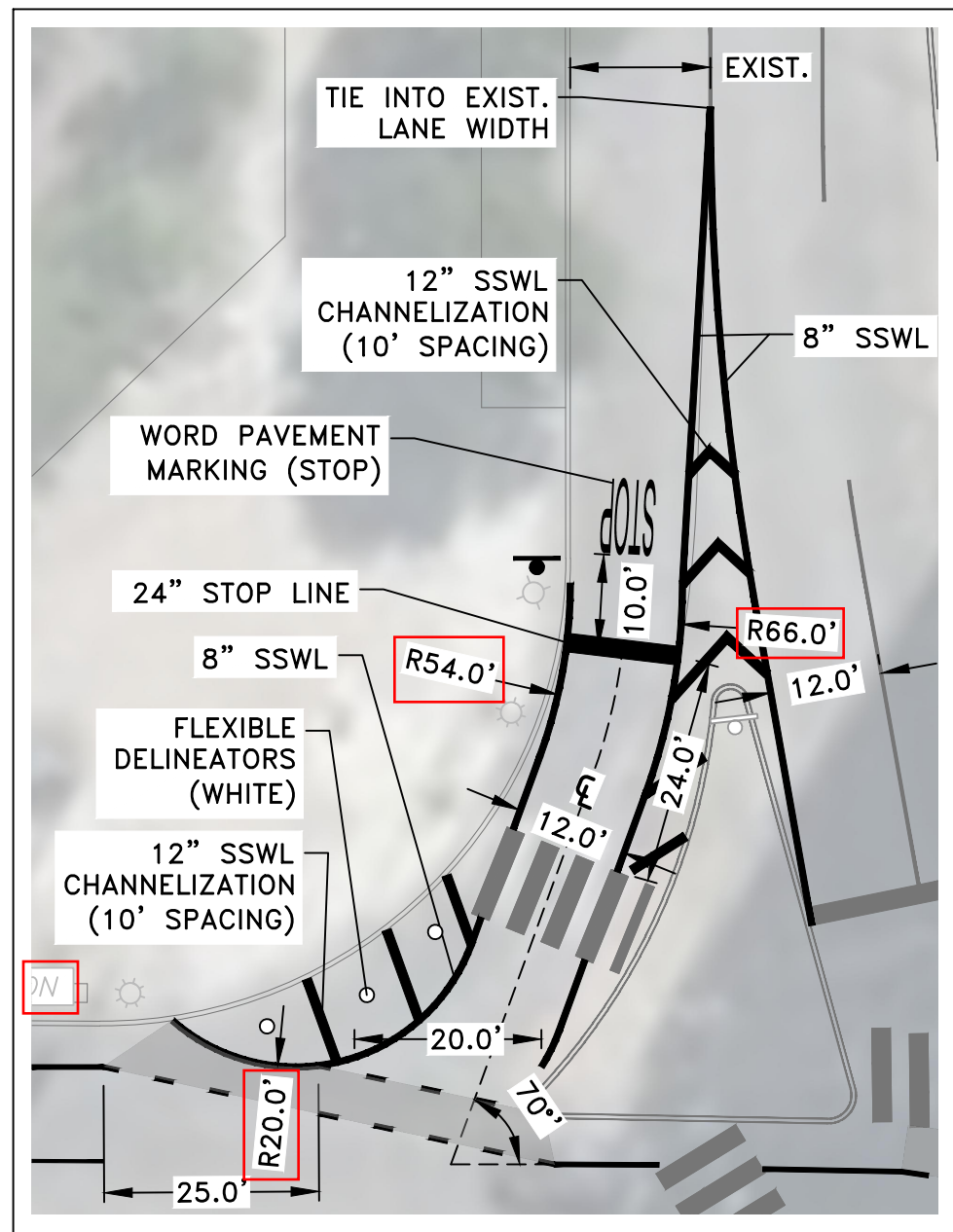
SSWL	- SINGLE SOLID WHITE LINE
SBWL	- SINGLE BROKEN WHITE LINE
DSYL	- DOUBLE SOLID YELLOW LINE
DWL	- DOTTED WHITE LINE
DYL	- DOTTED YELLOW LINE

4" UNLESS OTHERWISE SPECIFIED

LEGEND

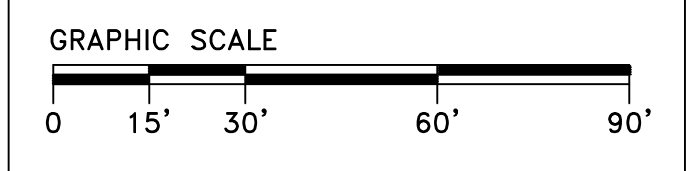
	GROUND MOUNTED SIGN (EXISTING TO REMAIN)
	GROUND MOUNTED SIGN (EXISTING TO BE REMOVED)
	GROUND MOUNTED SIGN (NEW)
	24 INCH WIDE STOP LINE (EXISTING)
	24 INCH WIDE STOP LINE (NEW)
	CROSSWALK PAVEMENT MARKINGS (EXISTING)
	CROSSWALK PAVEMENT MARKINGS (NEW)
	ARROW PAVEMENT MARKING (NEW)
	WORD PAVEMENT MARKING (NEW)
	CHANNELIZATION PAVEMENT MARKINGS (NEW, SEE TDOT STD DWG. T-M-3)
	BIKE LANE PAVEMENT MARKING (NEW)
	VERTICAL BIKE LANE PROTECTION (NEW)
	SHARROW PAVEMENT MARKING W/ GREEN BACKGROUND (NEW)
	GREEN COLORED PAVEMENT (NEW)
	YIELD LINE PAVEMENT MARKINGS (NEW)
	WEGO BUS STOP LOCATION (EXISTING TO REMAIN)
	PARK-IT SHUTTLE STOP LOCATION (TO BE RELOCATED PER MPW DIRECTION)

SPECIAL NOTE:
THE BASE SURVEY AND DESIGN INFORMATION FOR ROADWAY AND UTILITIES PRESENTED ON THIS PLAN WERE PROVIDED TO KCI TECHNOLOGIES, INC. BY METRO PUBLIC WORKS. WHERE AVAILABLE, BASE INFORMATION HAS BEEN SUPPLEMENTED BY PLANS OBTAINED FROM METRO PUBLIC WORKS AND FIELD OBSERVATIONS BY THE ENGINEER. KCI TECHNOLOGIES, INC. MAKES NO CLAIMS AS TO THE COMPLETENESS OR ACCURACY OF THE PROVIDED BASE INFORMATION.



URBAN SMART CHANNEL DETAIL
SCALE: 1"=20'

NOTE:
COMPOUND CURVE AND CHANNELIZATION PAVEMENT MARKINGS SHOULD CREATE A UNION AVENUE INTERSECTION ANGLE OF 70° WITH 3RD AVENUE N AS SHOWN IN THE DETAIL.



FILE NO.	891704370.13
DATE:	04/16/2021
DESIGNED BY:	JEG
DRAWN BY:	JEG
CHECKED BY:	JMC
REVISION BLOCK	
DATE:	

SEE SHEET 4

MATCH LINE

KCI TECHNOLOGIES

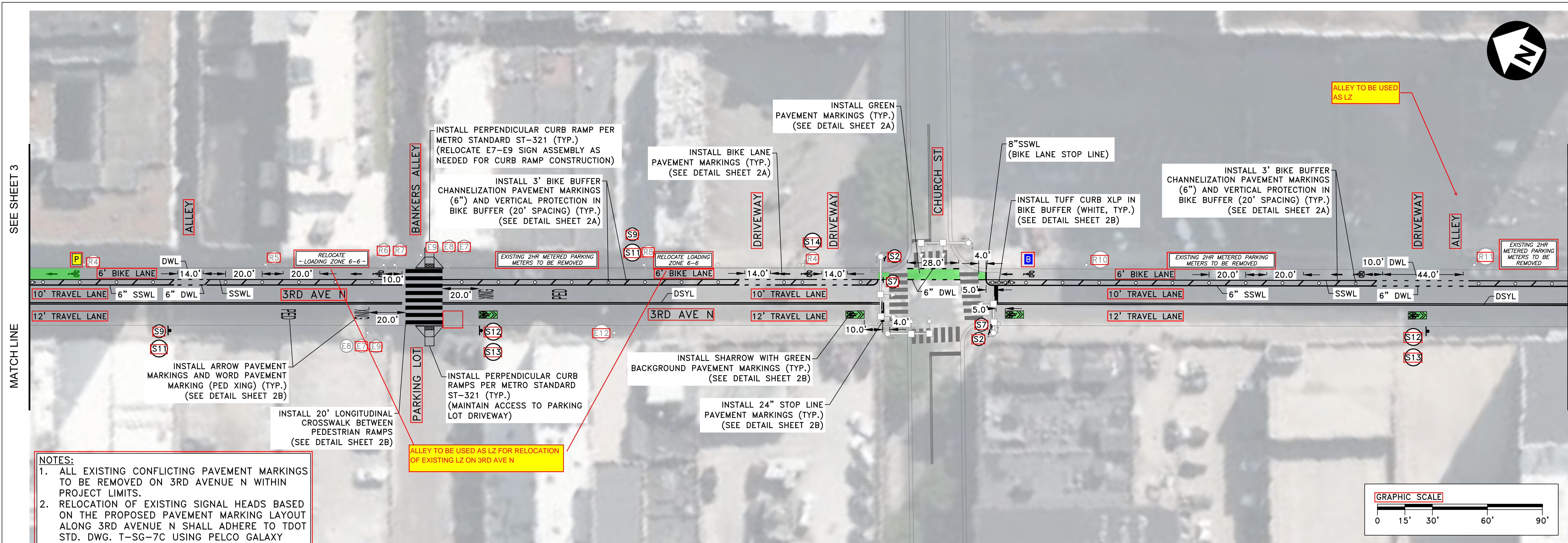
04/16/2021

3RD AVENUE N
BIKEWAY

Proposed Pavement Marking
and Signing Plan

SCALE: 1"=30'

SHEET 3



- NOTES:**
1. ALL EXISTING CONFLICTING PAVEMENT MARKINGS TO BE REMOVED ON 3RD AVENUE N WITHIN PROJECT LIMITS.
 2. RELOCATION OF EXISTING SIGNAL HEADS BASED ON THE PROPOSED PAVEMENT MARKING LAYOUT ALONG 3RD AVENUE N SHALL ADHERE TO TDOT STD. DWG. T-SG-7C USING PELCO GALAXY MOUNTING HARDWARE. INSTALL OVERHEAD SIGNS USING ASTRO BRACKET TYPE HARDWARE. EXISTING INTERNALLY ILLUMINATED STREET NAME SIGNS SHOULD REMAIN IN PLACE.

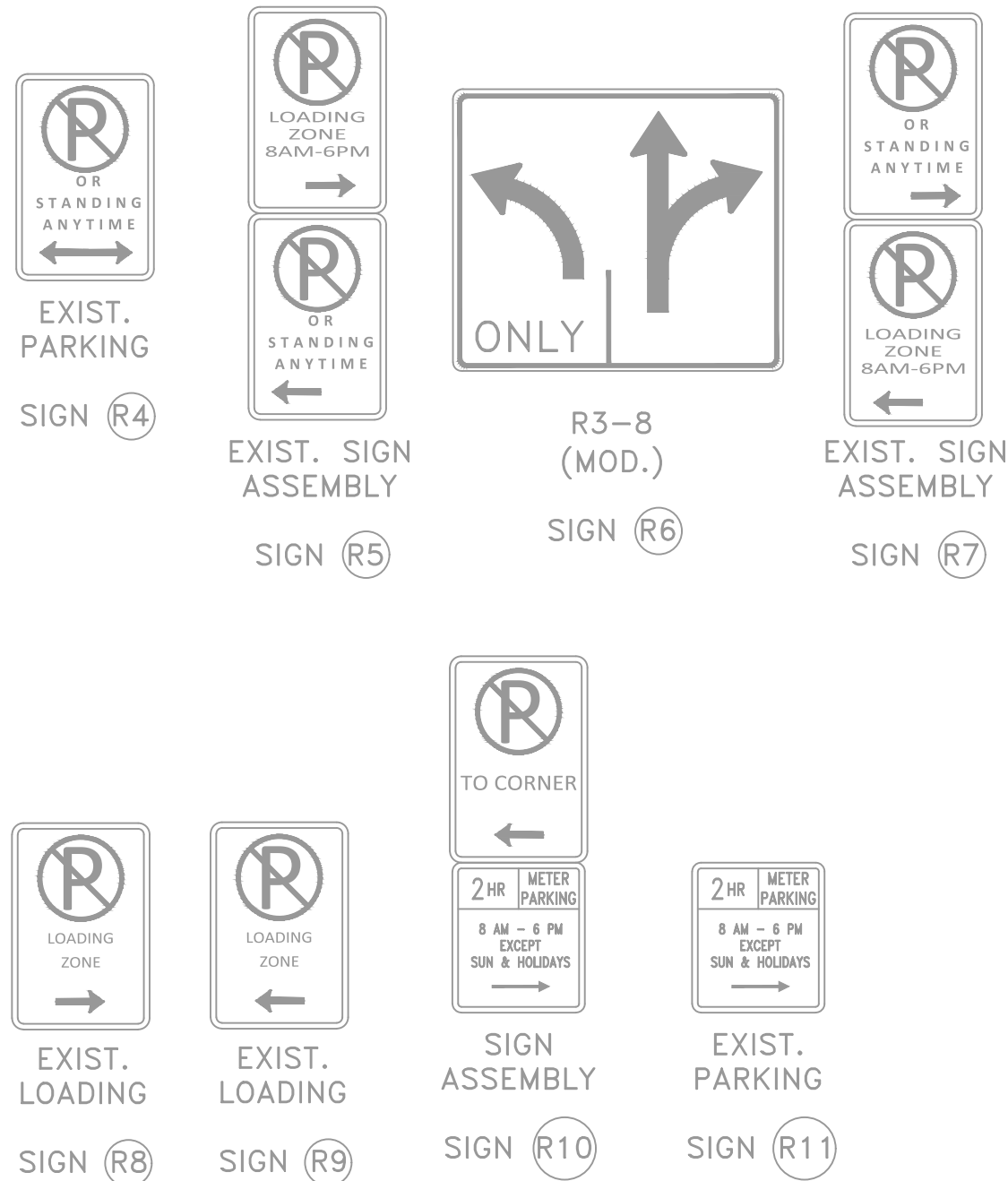
MARKING ABBREVIATIONS	
SSWL	- SINGLE SOLID WHITE LINE
SBWL	- SINGLE BROKEN WHITE LINE
DSYL	- DOUBLE SOLID YELLOW LINE
DWL	- DOTTED WHITE LINE
DYL	- DOTTED YELLOW LINE
4" UNLESS OTHERWISE SPECIFIED	

LEGEND

	GROUND MOUNTED SIGN (EXISTING TO REMAIN)
	GROUND MOUNTED SIGN (EXISTING TO BE REMOVED)
	GROUND MOUNTED SIGN (NEW)
	24 INCH WIDE STOP LINE (EXISTING)
	24 INCH WIDE STOP LINE (NEW)
	CROSSWALK PAVEMENT MARKINGS (EXISTING)
	CROSSWALK PAVEMENT MARKINGS (NEW)
	ARROW PAVEMENT MARKING (NEW)
	WORD PAVEMENT MARKING (NEW)
	CHANNELIZATION PAVEMENT MARKINGS (NEW, SEE TDOT STD DWG. T-M-3)
	BIKE LANE PAVEMENT MARKING (NEW)
	VERTICAL BIKE LANE PROTECTION (NEW)
	SHARROW PAVEMENT MARKING W/ GREEN BACKGROUND (NEW)
	GREEN COLORED PAVEMENT (NEW)
	YIELD LINE PAVEMENT MARKINGS (NEW)
	WEGO BUS STOP LOCATION (EXISTING TO REMAIN)
	PARK-IT SHUTTLE STOP LOCATION (TO BE RELOCATED PER MPW DIRECTION)

SPECIAL NOTE:
THE BASE SURVEY AND DESIGN INFORMATION FOR ROADWAY AND UTILITIES PRESENTED ON THIS PLAN WERE PROVIDED TO KCI TECHNOLOGIES, INC. BY METRO PUBLIC WORKS. WHERE AVAILABLE, BASE INFORMATION HAS BEEN SUPPLEMENTED BY PLANS OBTAINED FROM METRO PUBLIC WORKS AND FIELD OBSERVATIONS BY THE ENGINEER. KCI TECHNOLOGIES, INC. MAKES NO CLAIMS AS TO THE COMPLETENESS OR ACCURACY OF THE PROVIDED BASE INFORMATION.

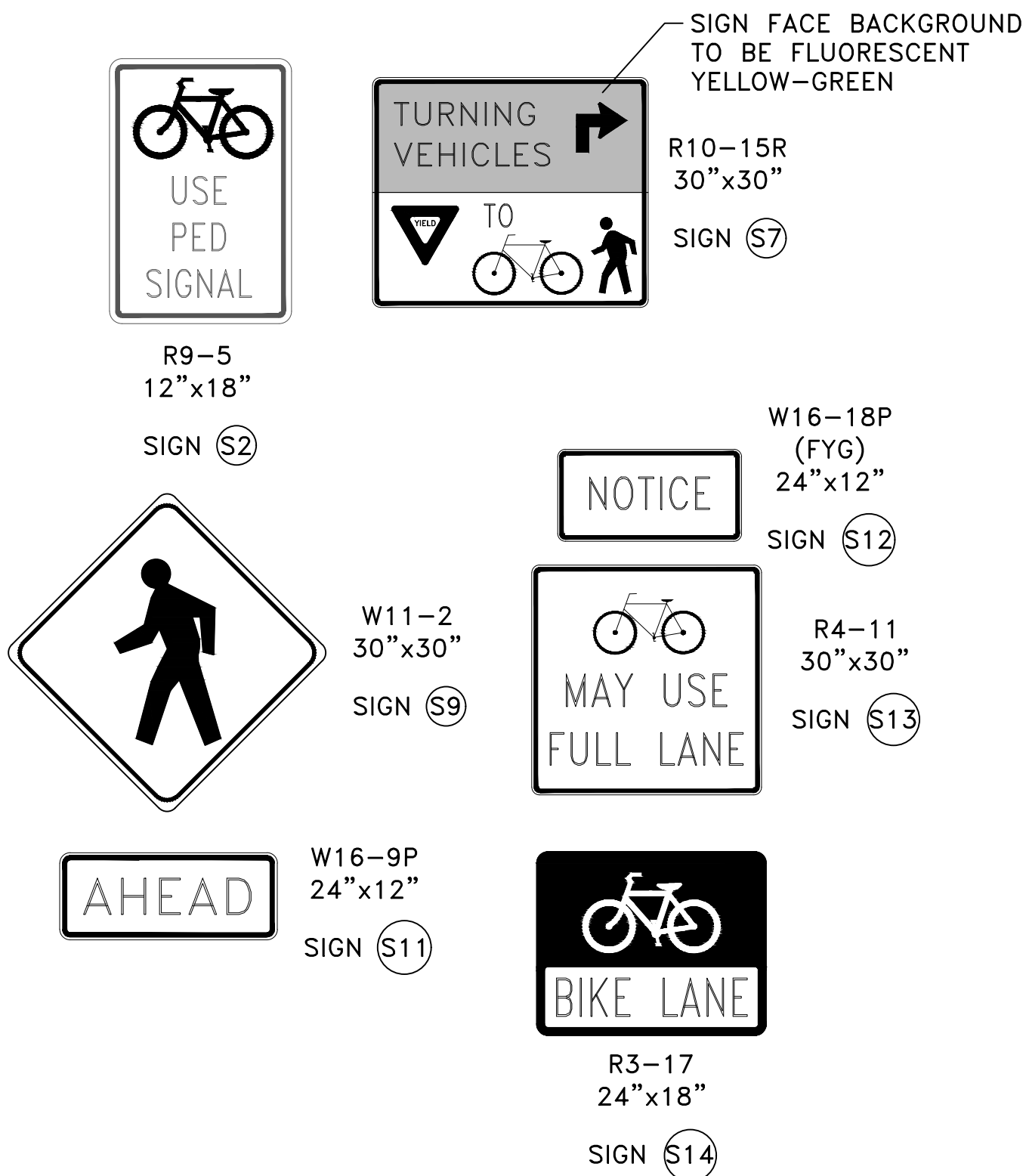
TRAFFIC SIGNS
(EXISTING TO BE REMOVED)



TRAFFIC SIGNS
(EXISTING TO REMAIN)

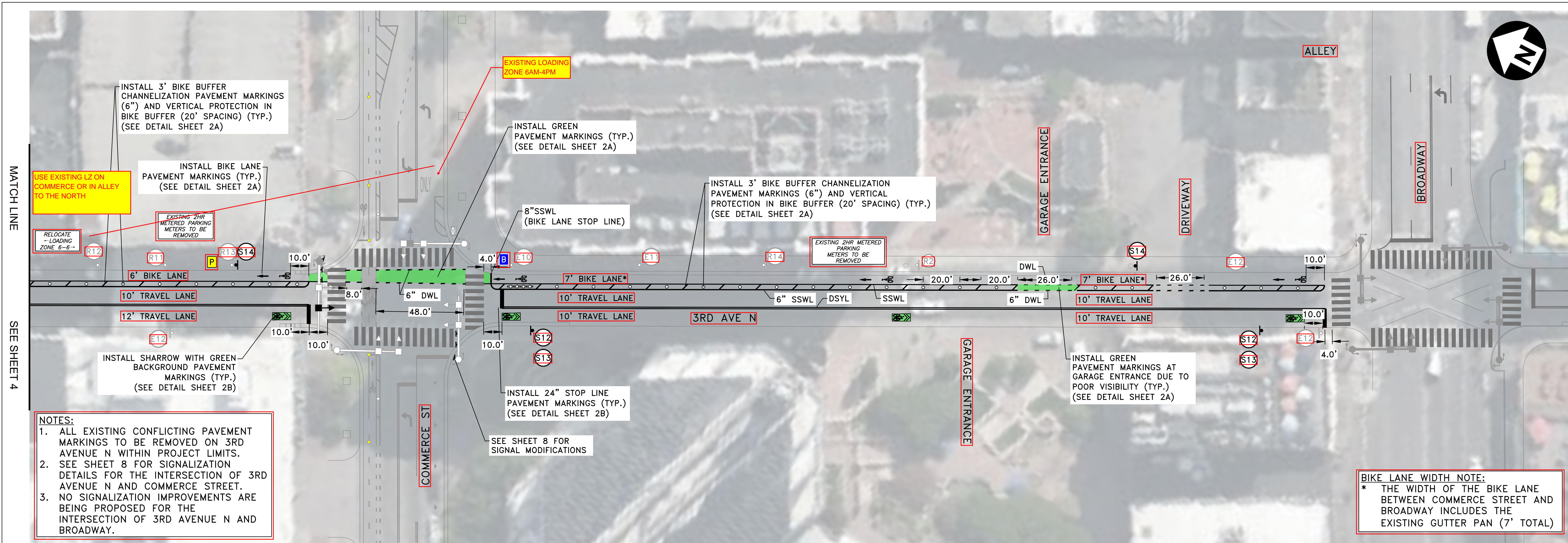


TRAFFIC SIGNS
(NEW)

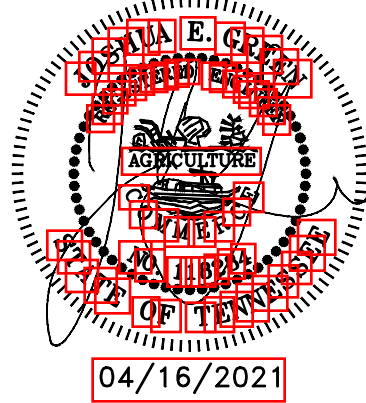


NOTE
SEE TRAFFIC SIGNAL MODIFICATION PLAN SHEETS FOR ADDITIONAL TRAFFIC SIGNS TO BE INSTALLED AT SIGNALIZED INTERSECTIONS.

FILE NO:	891704370.13
DATE:	04/16/2021
DESIGNED BY:	JEG
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CHECKED BY:	JMC
REVISION BLOCK	
DATE:	
04/16/2021	
METROPOLITAN GOVERNMENT OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	
3RD AVENUE N BIKEWAY	
Proposed Pavement Marking and Signing Plan	
SCALE: 1"=30'	
SHEET 4	



FILE NO:	891704370.13
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DATE:	



METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

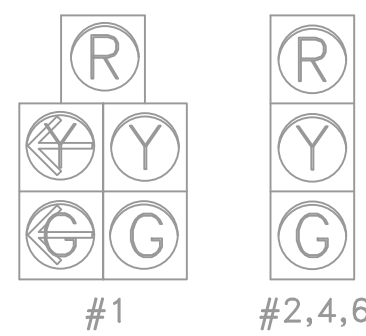
3RD AVENUE N
BIKEWAY

Proposed Pavement Marking
and Signing Plan

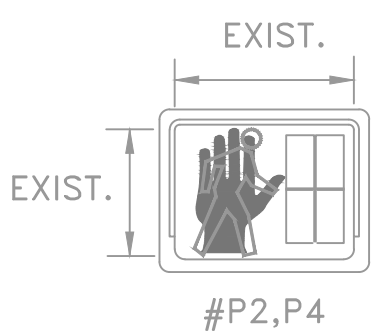
SCALE: 1"=30'

SHEET 5

SIGNAL HEAD DISPLAYS
(EXIST.)

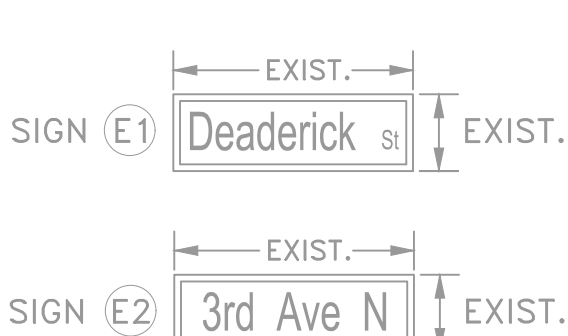


RELOCATE EXISTING SIGNAL HEAD NOTE:
• EXISTING SIGNAL HEADS (#1,2,6) TO BE RELOCATED BASED ON THE PROPOSED PAVEMENT MARKING LAYOUT.
• SEE TDOT STD. DWG. T-SG-7C & T-SG-7D.



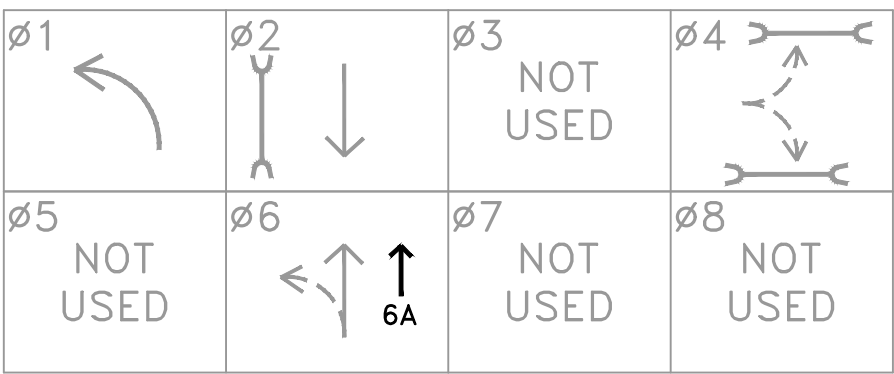
COUNTDOWN TYPE L.E.D PED WITH OVERLAPPING SOLID SYMBOLS
COLOR LEGEND
MAN - WHITE
HAND - PORTLAND ORANGE

OVERHEAD STREET NAME
SIGNS (SNS) (EXIST.)



NOTE:
EXISTING INTERNALLY ILLUMINATED STREET NAME SIGNS SHOULD REMAIN IN PLACE.

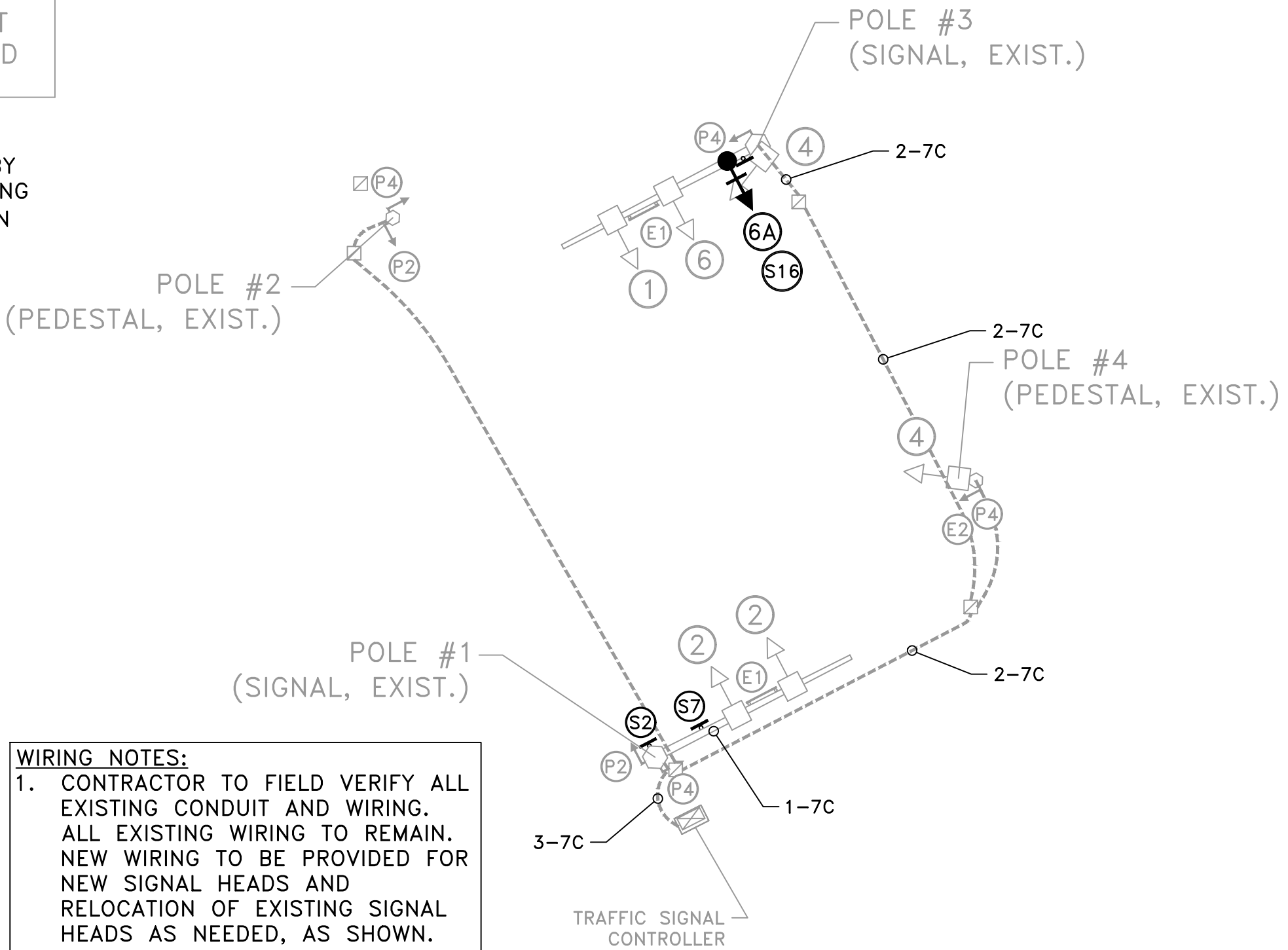
PHASING DIAGRAM
(EXIST.)



PERMITTED, BUT NOT PROTECTED

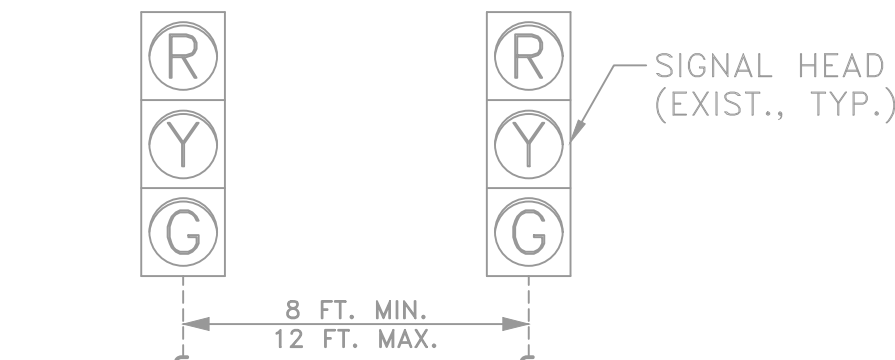
MOVEMENT 6A TO BE CONTROLLED BY BIKE SIGNAL AND TO INCLUDE LEADING BIKE INTERVAL (LBI) IN CONJUNCTION WITH LEADING PEDESTRIAN INTERVAL (LPI) FOR PHASE P2

WIRING DIAGRAM
SCALE: 1"=20'

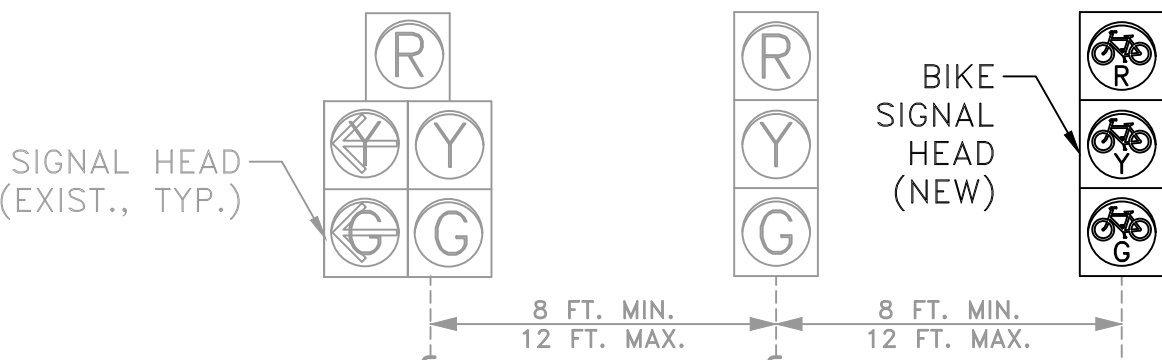


WIRING NOTES:
1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDUIT AND WIRING. ALL EXISTING WIRING TO REMAIN. NEW WIRING TO BE PROVIDED FOR NEW SIGNAL HEADS AND RELOCATION OF EXISTING SIGNAL HEADS AS NEEDED, AS SHOWN.

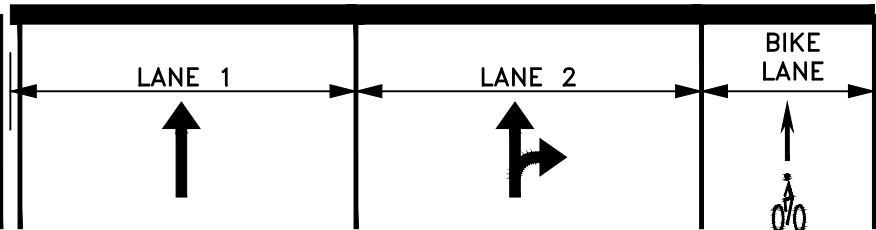
TYPICAL MOTOR
VEHICLE SIGNAL HEAD
PLACEMENT DETAIL
(PER TDOT STD. DWG. T-SG-7C)



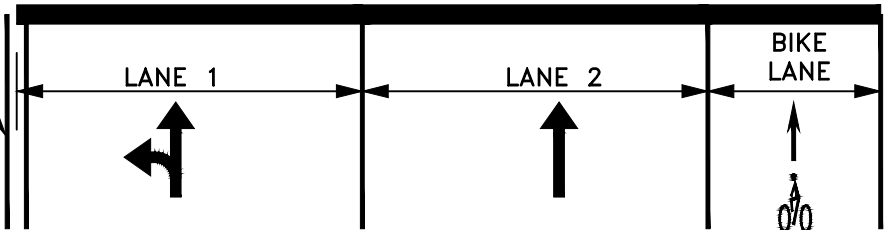
TYPICAL MOTOR
VEHICLE SIGNAL HEAD
PLACEMENT DETAIL
(PER TDOT STD. DWG. T-SG-7D)



PERMISSIVE LEFT TURN PHASING
(EXISTING SIGNAL HEADS #2)



PROTECTED / PERMISSIVE LEFT
TURN PHASING
(EXISTING SIGNAL HEADS #1,6)
(PROPOSED SIGNAL HEAD #6A)



MAST ARM DETAILS
N.T.S.

POLE	SH1	SH2	SH3	BSH1	SNS1	S2	S7
#1	*	*	-	-	EXIST.	ON POLE	***
#3	**	**	EXIST.	**	EXIST.	-	-

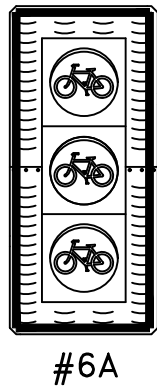
NOTES:
• DISTANCES BASED ON APPROXIMATE SIGNAL POLE LOCATIONS INDICATED ON PLAN. EXISTING SIGNAL HEADS TO BE PLACED IN RELATION TO THE PROPOSED PAVEMENT MARKING LAYOUT.
• REFER TO TDOT STD. DWG. T-SG-9 FOR ADDITIONAL DETAILS.

* SEE TYPICAL SIGNAL HEAD PLACEMENT DETAIL ON THIS SHEET (PER T-SG-7C).
** SEE TYPICAL SIGNAL HEAD PLACEMENT DETAIL ON THIS SHEET (PER T-SG-7D). BIKE SIGNAL TO ALIGN WITH BIKE LANE APPROACH.
*** NEW SIGNS MOUNTED TO EXISTING MAST ARM TO BE 4' MINIMUM FROM NEAREST SIGNAL HEAD.



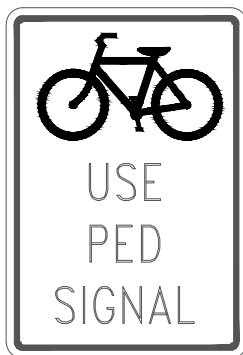
GRAPHIC SCALE
0 10' 20' 40' 60'

BIKE SIGNAL HEAD DISPLAYS
(NEW)

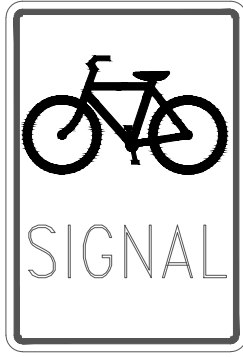


BIKE SIGNAL HEAD NOTES:
• RETRO REFLECTIVE TAPE 1"-3" WIDE SHOULD BE PLACED AROUND THE PERIMETER OF BIKE SIGNAL BACKPLATE.
• NEW BIKE SIGNAL HEAD TO HAVE 8" SIGNAL INDICATIONS.
• SIGNAL HEAD TO BE POSITIONED LATERALLY OVER THE EXISTING CURB LINE ON THE EXISTING MAST ARM.

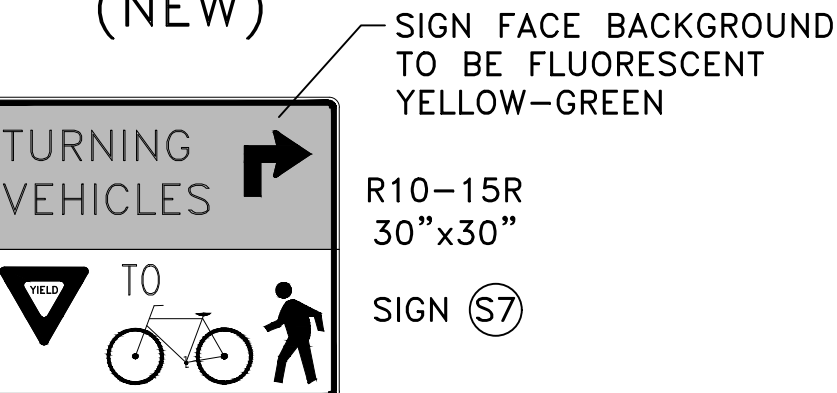
TRAFFIC SIGNS
(NEW)



R9-5
12"x18"
SIGN #S2



R10-10b
12"x18"
SIGN #S16



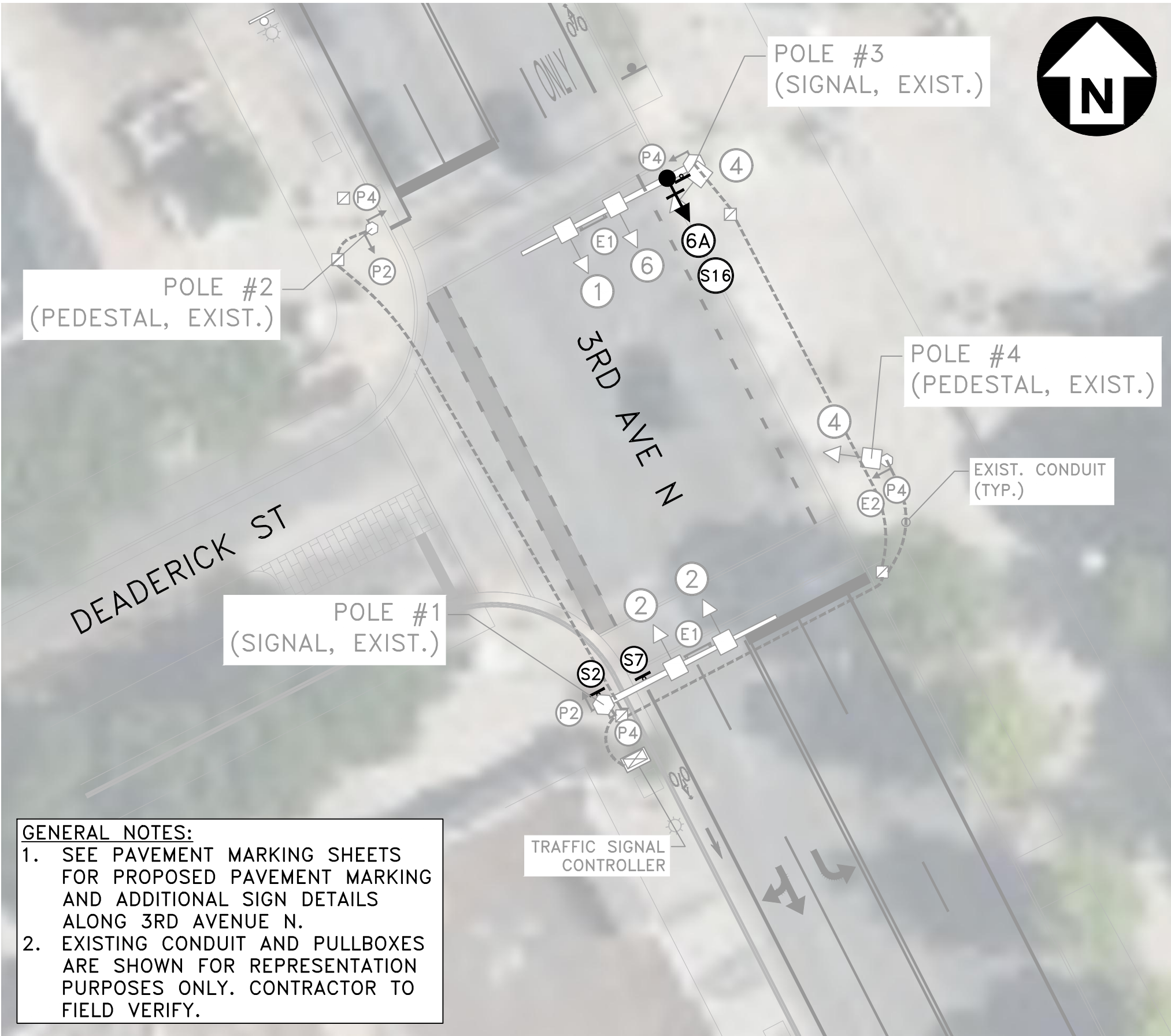
R10-15R
30"x30"
SIGN #S7

TRAFFIC SIGN NOTES:
• SIGN S2 TO BE MOUNTED ON THE EXISTING SIGNAL POLE, DIRECTLY BELOW THE EXISTING PEDESTRIAN SIGNAL HEAD P2. SIGN TO HAVE BLACK LEGEND ON WHITE BACKGROUND.
• SIGN S16 TO BE MOUNTED DIRECTLY ADJACENT TO NEW BIKE SIGNAL HEAD. SIGN TO HAVE BLACK LEGEND ON WHITE BACKGROUND.
• NEW SIGN S7 MOUNTED TO EXISTING MAST ARM TO BE 4' MINIMUM FROM NEAREST SIGNAL HEAD AND SIGN.

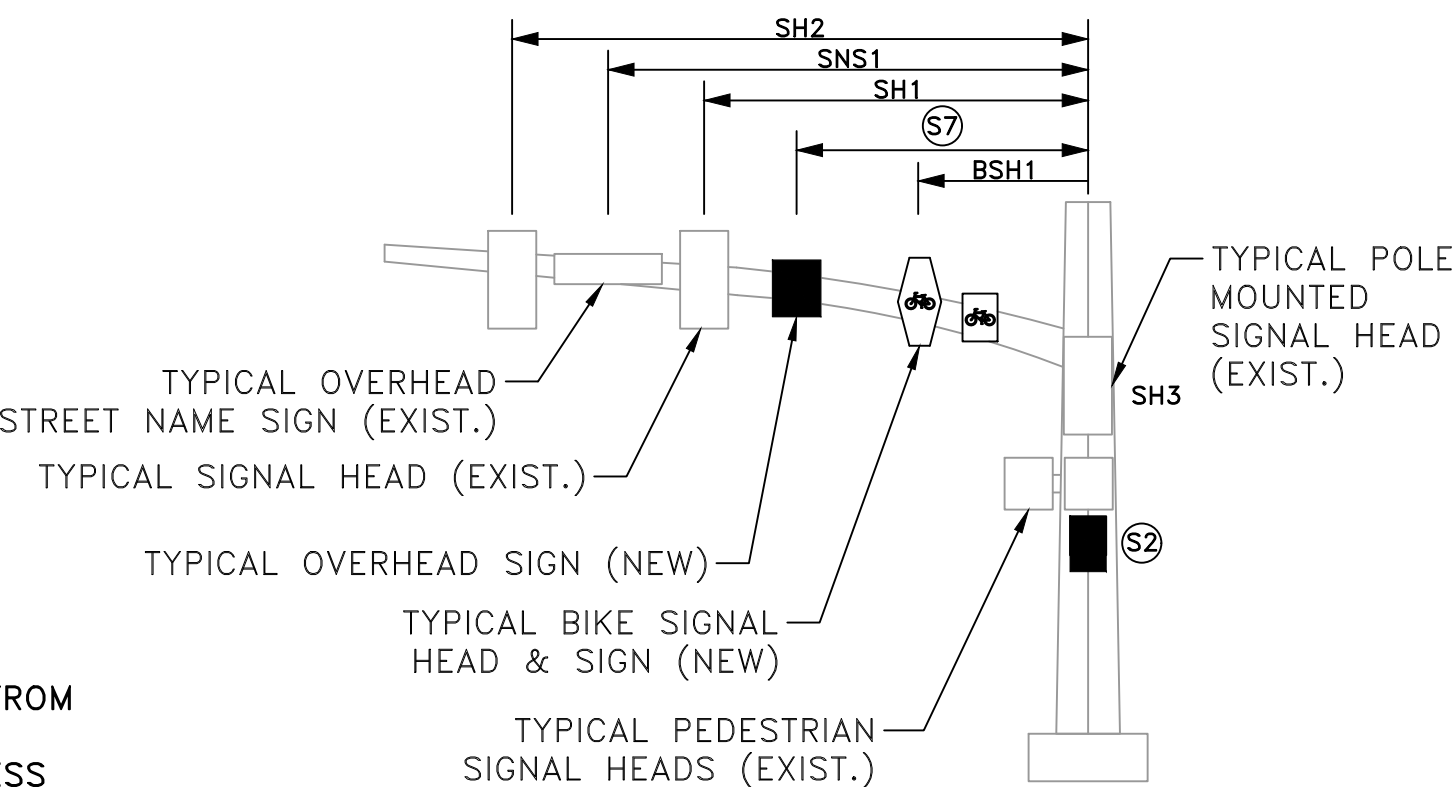
LEGEND

○	SIGNAL SUPPORT POLE WITH MAST ARM (EXISTING)
○	PEDESTAL POLE (EXISTING)
□	SIGNAL HEAD W/ NUMBER (EXISTING)
□	PEDESTRIAN SIGNAL HEAD W/ NUMBER (EXISTING)
□	PAD MOUNTED TRAFFIC SIGNAL CONTROLLER (EXISTING)
□	PULL BOX (EXISTING)
□	UNDERGROUND CONDUIT (EXISTING)
□	OVERHEAD STREET NAME SIGN W/ NUMBER (EXISTING)
□	BIKE SIGNAL HEAD W/ NUMBER & BACK PLATE (NEW)
□	POLE OR MAST ARM MOUNTED SIGN W/ NUMBER (NEW)
□	GROUND MOUNTED SIGN (NEW, SEE PROPOSED PAVEMENT MARKING AND SIGNING PLAN)
□	GROUND MOUNTED SIGN (EXISTING, SEE PROPOSED PAVEMENT MARKING AND SIGNING PLAN)

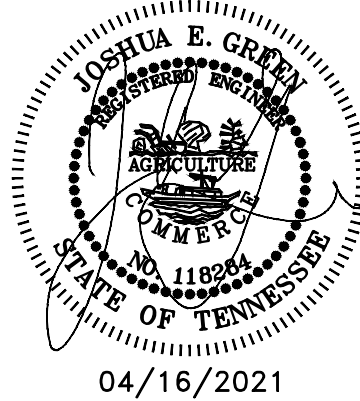
SPECIAL NOTE:
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GENERAL NOTES:
1. SEE PAVEMENT MARKING SHEETS FOR PROPOSED PAVEMENT MARKING AND ADDITIONAL SIGN DETAILS ALONG 3RD AVENUE N.
2. EXISTING CONDUIT AND PULLBOXES ARE SHOWN FOR REPRESENTATION PURPOSES ONLY. CONTRACTOR TO FIELD VERIFY.



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DATE:	



METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

INTERSECTION NO. 1160

TRAFFIC SIGNAL
MODIFICATION PLAN

3rd Avenue N and
Deaderick Street

SCALE: 1"=20'

SHEET 6



#3A,4A

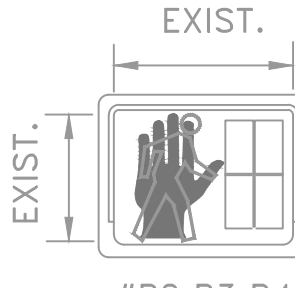


#2,3,4

SIGNAL HEAD DISPLAYS (EXIST.)

RELOCATE EXISTING SIGNAL HEAD NOTE:

- EXISTING SIGNAL HEADS (#3,3A,4,4A) TO BE RELOCATED BASED ON THE PROPOSED PAVEMENT MARKING LAYOUT.
- SEE TDOT STD. DWG. T-SG-7C & T-SG-7D.

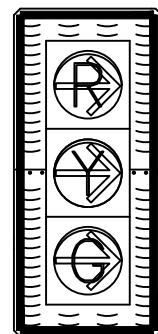


#P2,P3,P4

COUNTDOWN TYPE
L.E.D PED WITH
OVERLAPPING
SOLID SYMBOLS

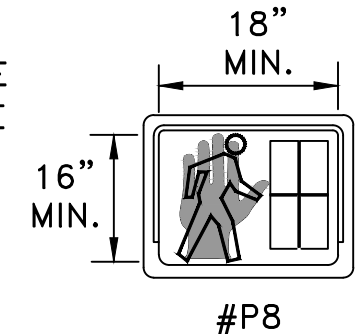
COLOR LEGEND
MAN - WHITE
HAND - PORTLAND
ORANGE

SIGNAL HEAD DISPLAYS (NEW)



#2A

SIGNAL HEAD NOTE:
1. RETRO REFLECTIVE
TAPE 1"-3" WIDE
SHOULD BE
PLACED AROUND
THE PERIMETER
OF EACH SIGNAL
BACKPLATE.

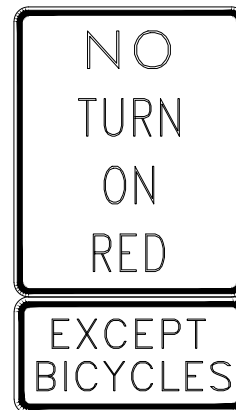


#P8

COUNTDOWN TYPE
L.E.D PED WITH
OVERLAPPING
SOLID SYMBOLS

COLOR LEGEND
MAN - WHITE
HAND - PORTLAND
ORANGE

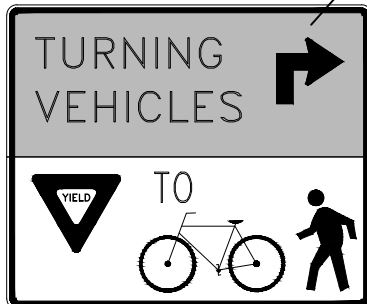
TRAFFIC SIGNS (NEW)



R10-11a
30"x36"
SIGN (S5)



R3-7bP
MOD.
30"x12"
SIGN (S6)



SIGN FACE BACKGROUND
TO BE FLUORESCENT
YELLOW-GREEN

R10-15R
30"x30"
SIGN (S7)

TRAFFIC SIGN NOTES:

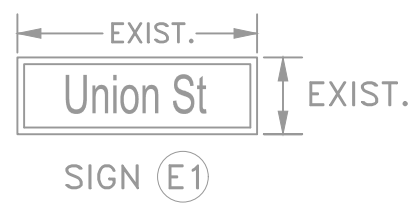
- NEW SIGNS S5, S6, S7 MOUNTED TO EXISTING MAST ARM TO BE 4' MINIMUM FROM NEAREST SIGNAL HEAD AND SIGN.
- NEW SIGNS S5 & S6 TO BE ON A SINGLE FLAT ALUMINUM SHEET.

LEGEND

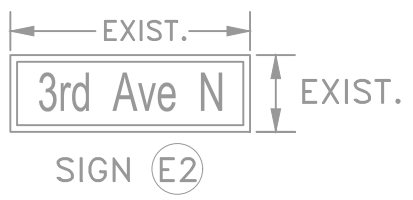
	SIGNAL SUPPORT POLE WITH MAST ARM (EXISTING)
	PEDESTAL POLE (EXISTING)
	SIGNAL HEAD W/ NUMBER (EXISTING)
	PEDESTRIAN SIGNAL HEAD W/ NUMBER (EXISTING)
	PAD MOUNTED TRAFFIC SIGNAL CONTROLLER (EXISTING)
	PULL BOX (EXISTING)
	UNDERGROUND CONDUIT (EXISTING)
	OVERHEAD STREET NAME SIGN W/ NUMBER (EXISTING)
	MAST ARM (NEW)
	SIGNAL HEAD W/ NUMBER & BACK PLATE (NEW)
	PEDESTAL POLE (NEW)
	PEDESTRIAN SIGNAL HEAD W/ NUMBER (NEW)
	POLE OR MAST ARM MOUNTED SIGN W/ NUMBER (NEW)
	OVERHEAD STREET NAME SIGN W/ NUMBER (NEW)
	PULL BOX (TYPE B, NEW)
	UNDERGROUND CONDUIT (NEW)
	GROUND MOUNTED SIGN (NEW, SEE PROPOSED PAVEMENT MARKING AND SIGNING PLAN)
	GROUND MOUNTED SIGN (EXISTING, SEE PROPOSED PAVEMENT MARKING AND SIGNING PLAN)

SPECIAL NOTE:
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OVERHEAD STREET NAME SIGNS (SNS) (EXIST.)



SIGN (E1)



SIGN (E2)

NOTE:
EXISTING INTERNALLY
ILLUMINATED STREET NAME SIGNS
SHOULD REMAIN IN PLACE.

OVERHEAD STREET NAME SIGNS (SNS) (NEW)

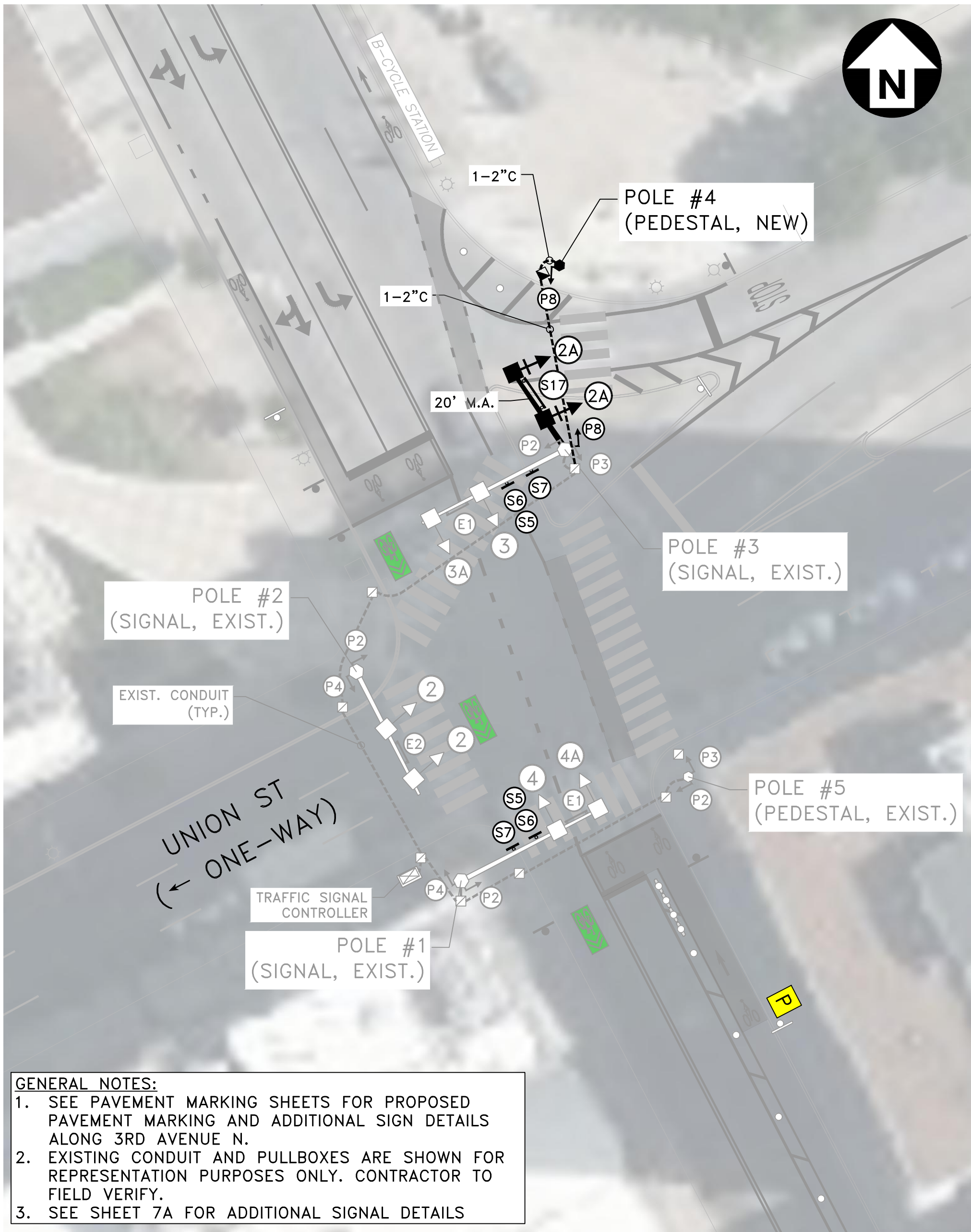


SIGN (S17)

NOTE:

- 8" U.C. LETTERS (MINIMUM)
- 6" L.C. LETTERS (MINIMUM)
- HIGH INTENSITY REFLECTIVE SHEETING
- REFLECTIVE WHITE COPY
- GREEN BACKGROUND
- PROVIDED BY MPW

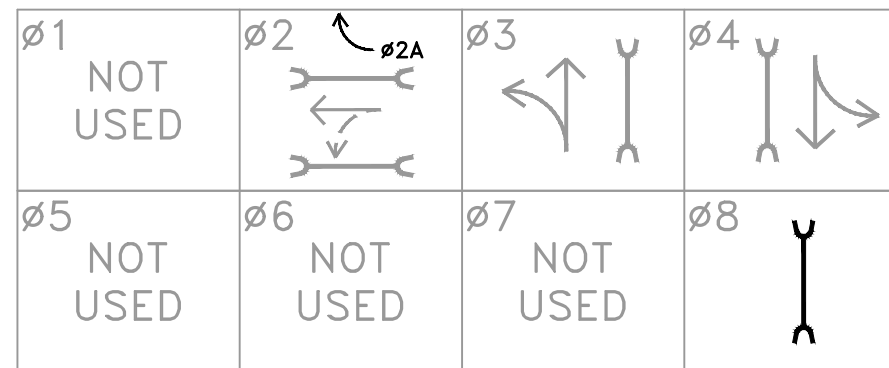
SNS LETTERING SHOWN FOR REFERENCE ONLY. SNS SIZE AND LETTERING TO BE COORDINATED AND DETERMINED BY METRO PUBLIC WORKS PRIOR TO FABRICATION AND INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE CITY, FABRICATIONS, AND INSTALLATIONS OF SNS'S.



GENERAL NOTES:

- SEE PAVEMENT MARKING SHEETS FOR PROPOSED PAVEMENT MARKING AND ADDITIONAL SIGN DETAILS ALONG 3RD AVENUE N.
- EXISTING CONDUIT AND PULLBOXES ARE SHOWN FOR REPRESENTATION PURPOSES ONLY. CONTRACTOR TO FIELD VERIFY.
- SEE SHEET 7A FOR ADDITIONAL SIGNAL DETAILS

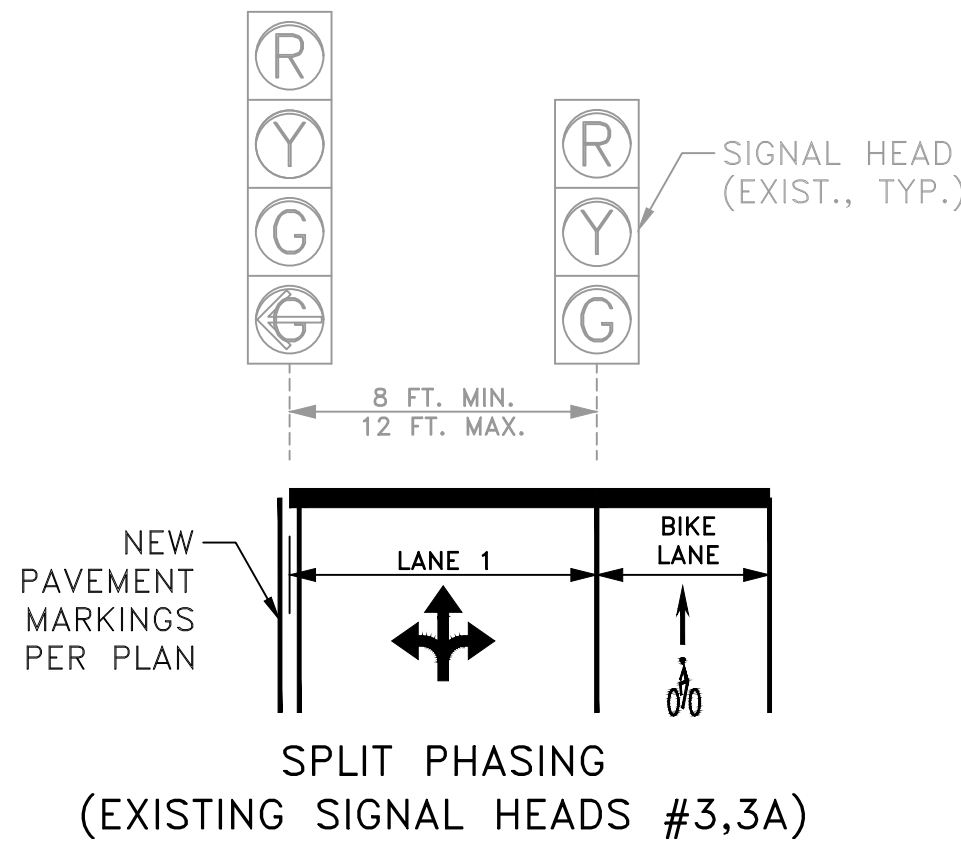
PHASING DIAGRAM



PERMITTED, BUT NOT PROTECTED

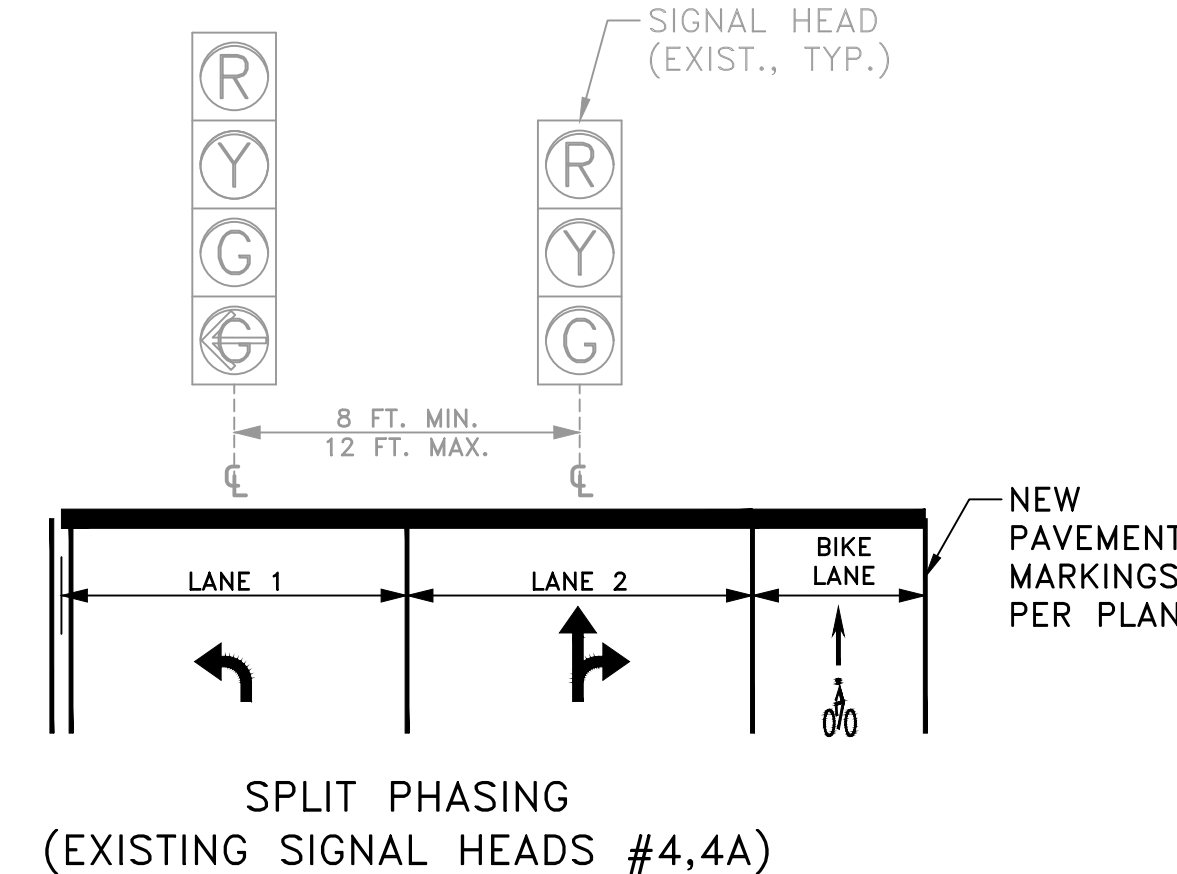
TYPICAL MOTOR VEHICLE SIGNAL HEAD PLACEMENT DETAIL

(PER TDOT STD. DWG. T-SG-7C)

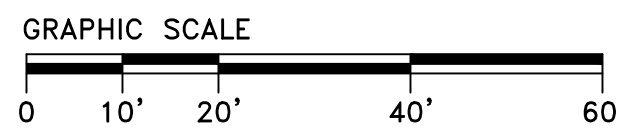


TYPICAL MOTOR VEHICLE SIGNAL HEAD PLACEMENT DETAIL

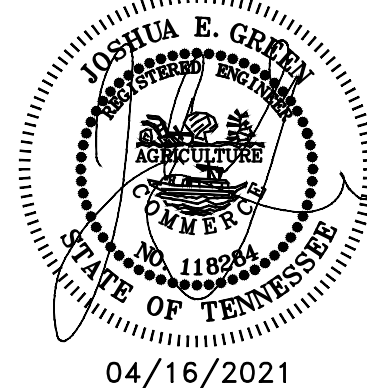
(PER TDOT STD. DWG. T-SG-7D MODIFIED)



NOTE: THE SIGNAL HEAD PLACEMENT FOR METRO NASHVILLE DIFFERS FROM TDOT STANDARDS AND THE EXISTING SIGNAL HEADS SHOULD BE RELOCATED BASED ON THIS MODIFIED DETAIL.



FILE NO.	891704370.13
DATE:	04/16/2021
DESIGNED BY:	JEG
DRAWN BY:	JEG
CHECKED BY:	JMC
REVISION BLOCK	
DATE:	



METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

INTERSECTION NO. 1220

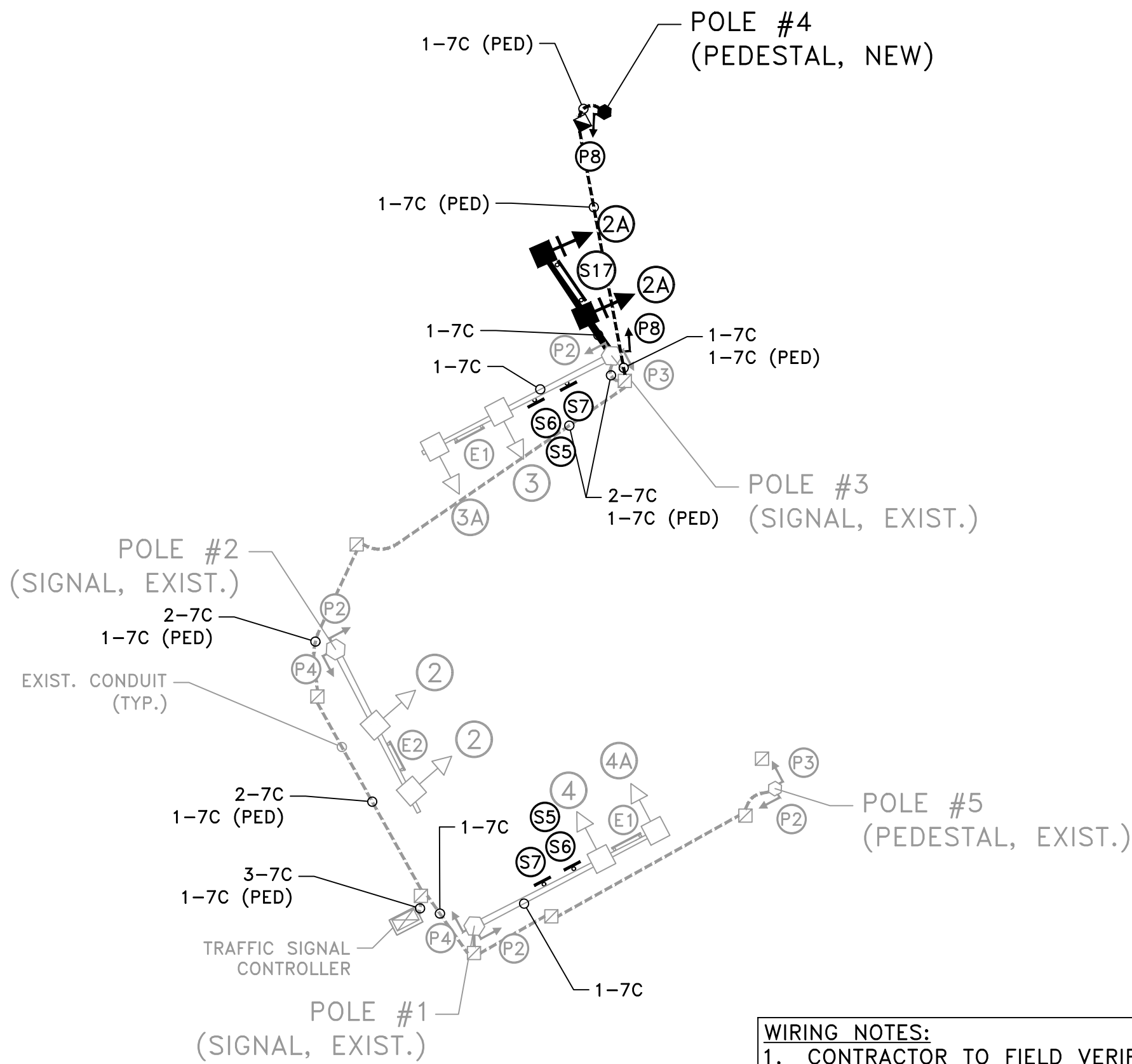
TRAFFIC SIGNAL MODIFICATION PLAN

3rd Avenue N and
Union Street

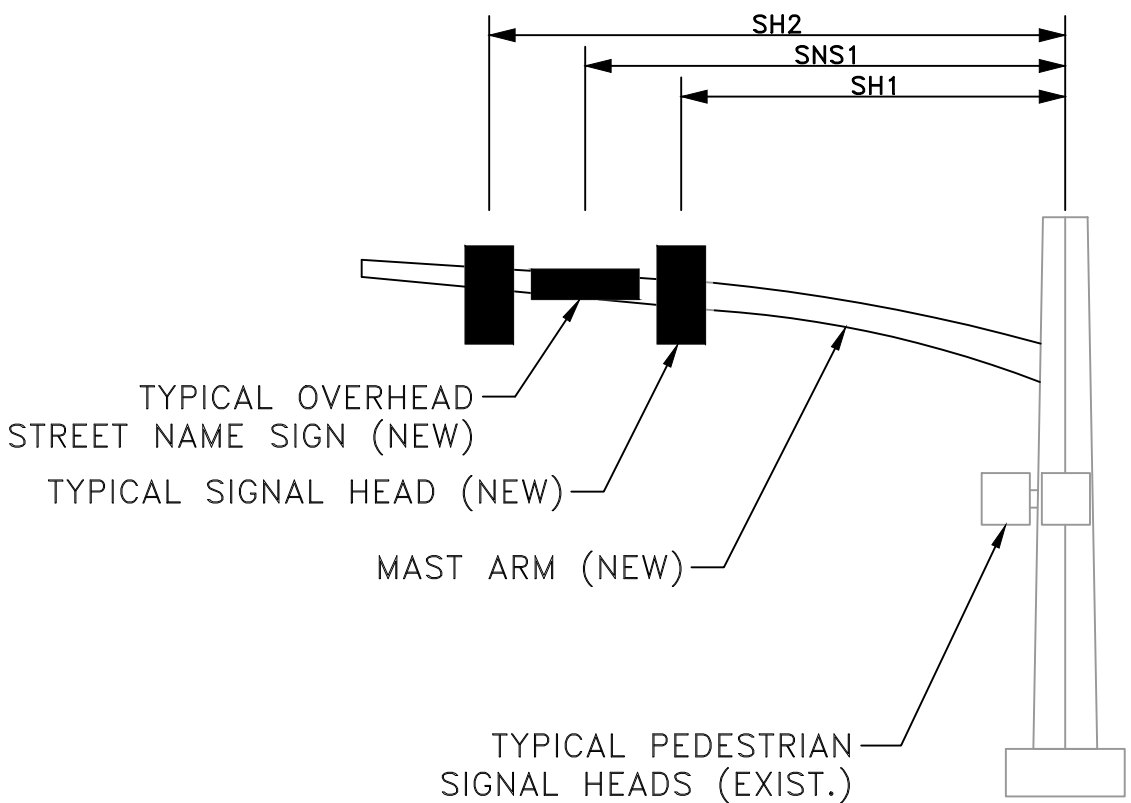
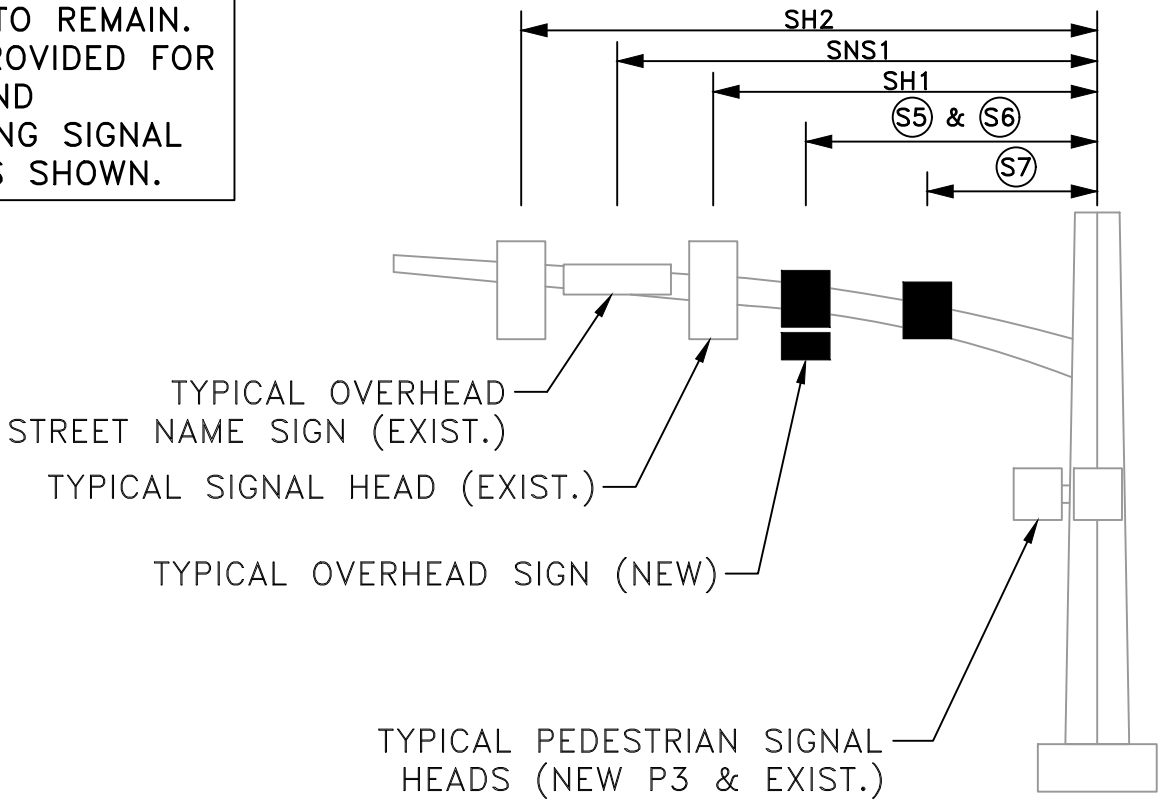
SCALE: 1"=20'

SHEET 7

WIRING DIAGRAM
SCALE: 1"=20'



WIRING NOTES:
1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDUIT AND WIRING. ALL EXISTING WIRING TO REMAIN. NEW WIRING TO BE PROVIDED FOR NEW SIGNAL HEADS AND RELOCATION OF EXISTING SIGNAL HEADS AS NEEDED, AS SHOWN.



MAST ARM DETAILS
N.T.S.

POLE	SH1	SH2	SNS1	S5	S6	S7
#1	*	*	EXIST.	***	***	***
#2	EXIST.	EXIST.	EXIST.	-	-	-
#3-NB	**	**	EXIST.	-	-	-

- NOTES:
- DISTANCES BASED ON APPROXIMATE SIGNAL POLE LOCATIONS INDICATED ON PLAN. EXISTING SIGNAL HEADS TO BE PLACED IN RELATION TO THE PROPOSED PAVEMENT MARKING LAYOUT.
 - REFER TO TDOT STD. DWG. T-SG-9 FOR ADDITIONAL DETAILS.

MAST ARM DETAILS
N.T.S.

POLE	SH1	SH2	SNS1
#3-WB	8'-0"	20'-0"	14'-0"

- NOTES:
- DISTANCES BASED ON APPROXIMATE SIGNAL POLE LOCATIONS INDICATED ON PLAN. EXISTING SIGNAL HEADS TO BE PLACED IN RELATION TO THE PROPOSED PAVEMENT MARKING LAYOUT.
 - REFER TO TDOT STD. DWG. T-SG-9 FOR ADDITIONAL DETAILS.

SIGNAL SUPPORT POLE DATA*

POLE NO.	POLE TYPE	HEIGHT	MAST ARM LENGTH	ATTACHMENT HEIGHT **	FOOTING DEPTH ***
1	CANTILEVER	EXIST.	EXIST.	EXIST.	EXIST.
2	CANTILEVER	EXIST.	EXIST.	EXIST.	EXIST.
3	CANTILEVER	EXIST.	NORTHBOUND EXIST. WESTBOUND 20'-0"	EXIST. 16'-0"	EXIST.
4	PEDESTAL	10'-0"	-	-	3'-0"
5	CANTILEVER	EXIST.	EXIST.	EXIST.	EXIST.

* POLE TO BE POWDER COATED BLACK CORE STYLE PEDESTAL.

** CONTACT M. HIRTZER AT MPW (615)880-3261 PRIOR TO MAKING ATTACHMENT. A MINIMUM OF 17 FEET CLEARANCE MUST BE ACHIEVED TO THE BOTTOM OF ALL SIGNAL HEADS.

*** PROVIDED FOR ESTIMATION PURPOSES ONLY. CONTRACTOR SHALL SUBMIT SIGNAL POLE FOOTING DESIGN CALCULATIONS ALONG WITH SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. DESIGN SHALL BE BASED UPON AASHTO LOADING AND DESIGN CRITERIA PUBLISHED IN THE 2009 EDITION OF "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

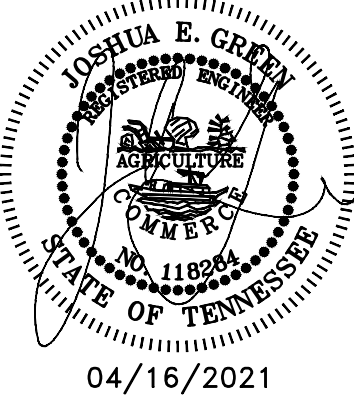
- * SEE TYPICAL SIGNAL HEAD PLACEMENT DETAIL ON SHEET 7 (PER T-SG-7D MODIFIED).
- ** SEE TYPICAL SIGNAL HEAD PLACEMENT DETAIL ON SHEET 7 (PER T-SG-7C).
- *** NEW SIGNS MOUNTED TO EXISTING MAST ARM TO BE 4' MINIMUM FROM NEAREST SIGNAL HEAD AND SIGN.



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METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

INTERSECTION NO. 1220

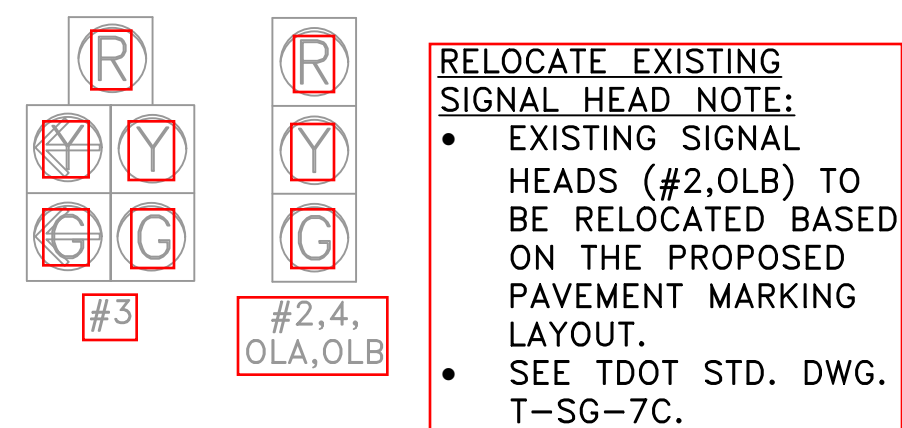
TRAFFIC SIGNAL
MODIFICATION PLAN

3rd Avenue N and
Union Street

SCALE: 1"=20'

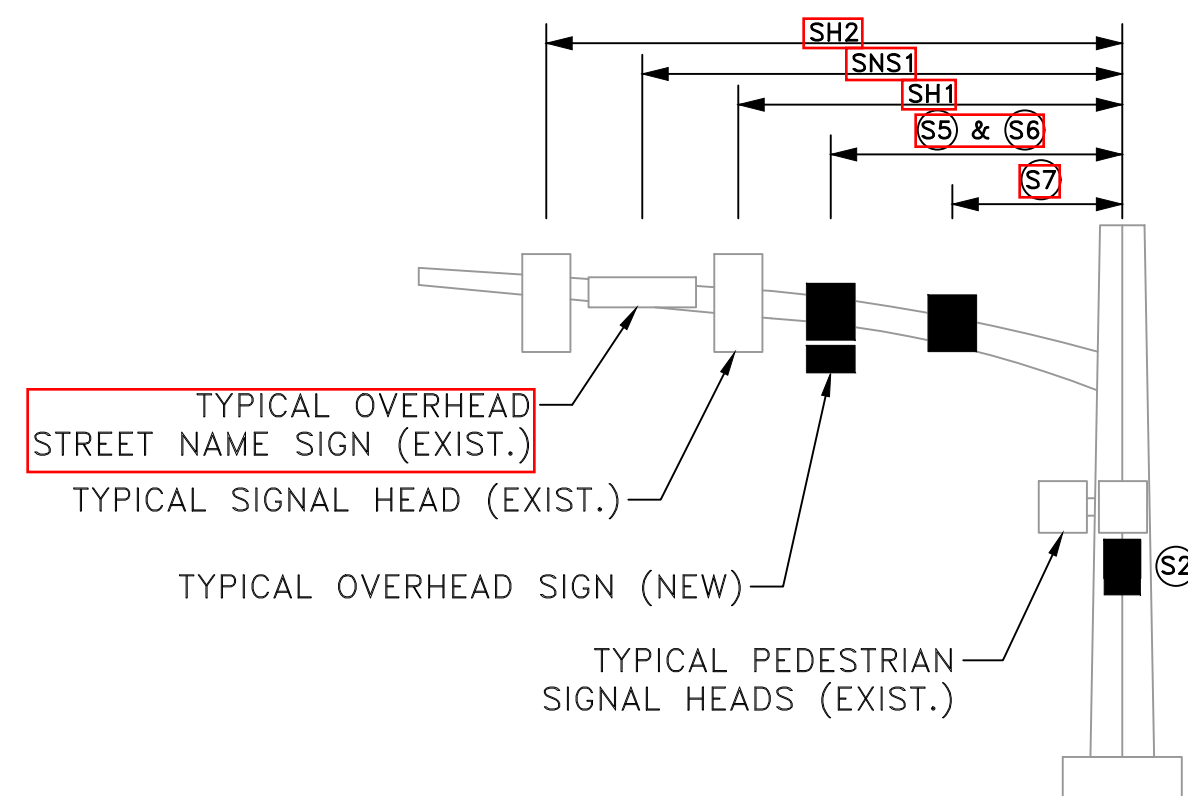
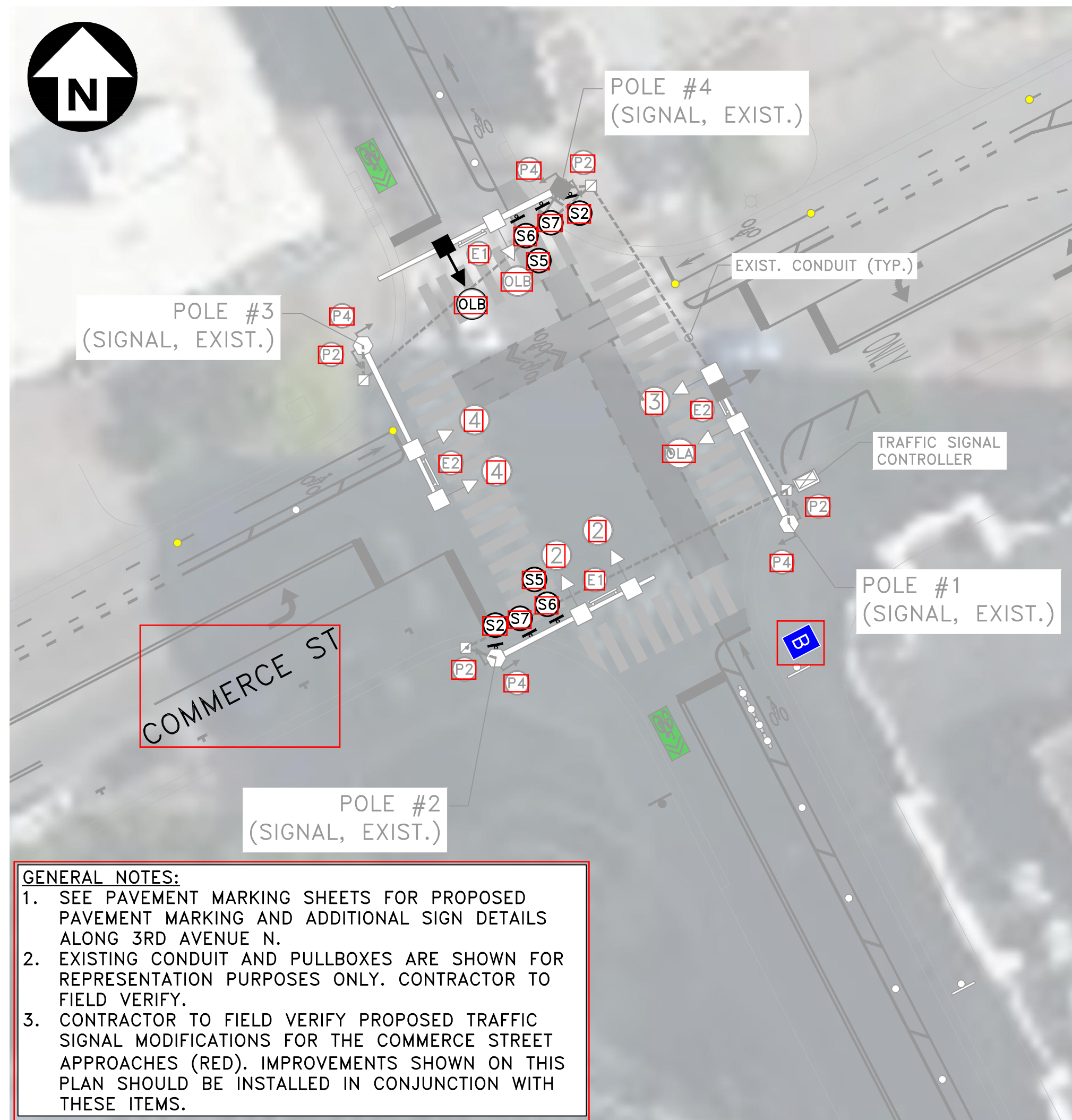
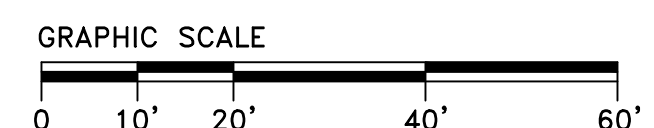
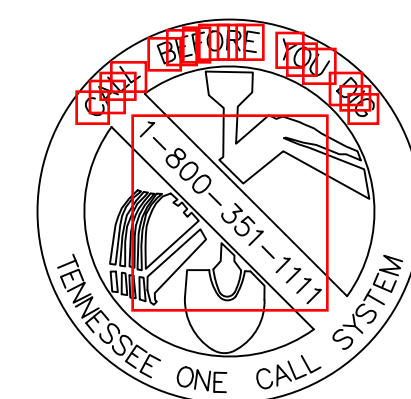
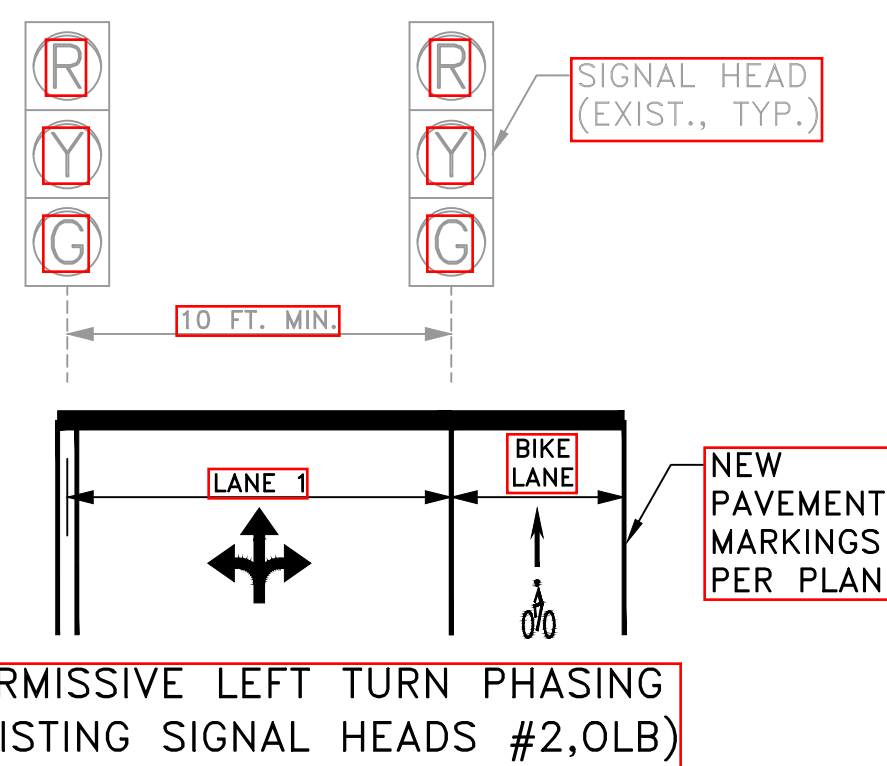
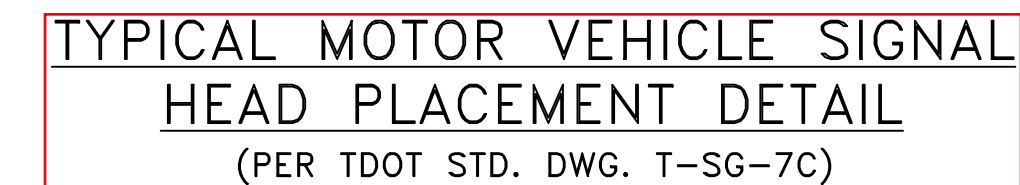
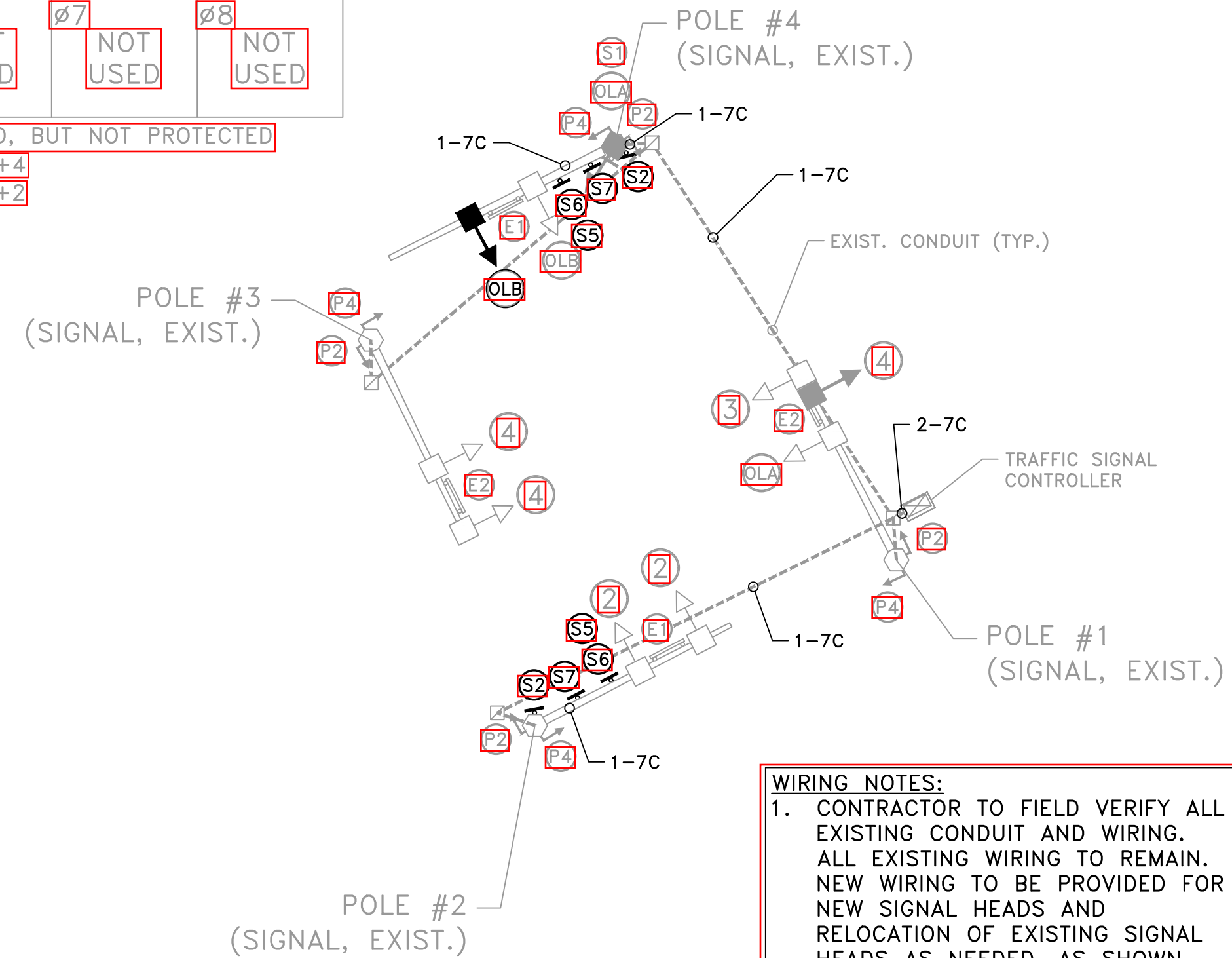
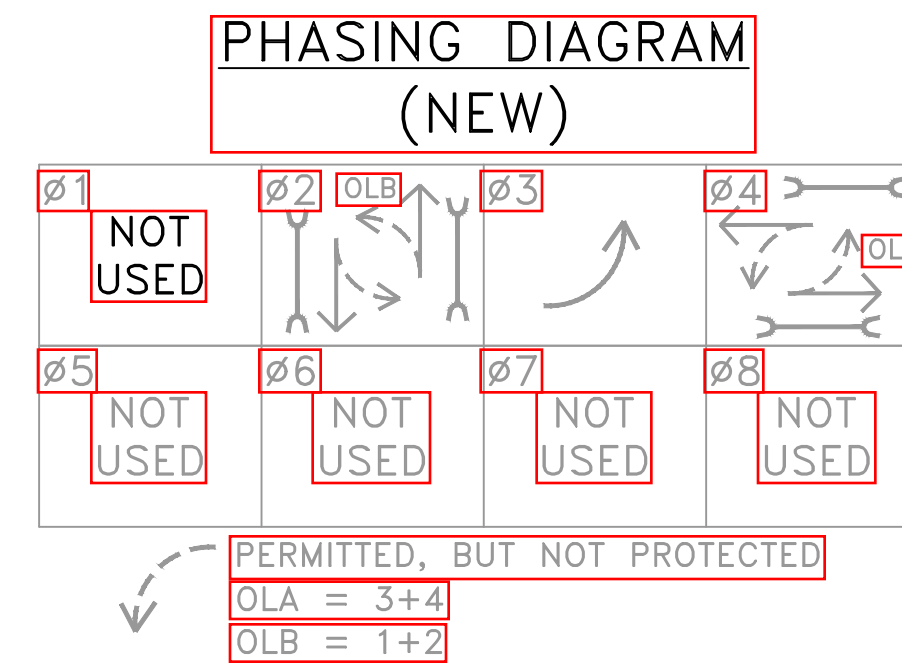
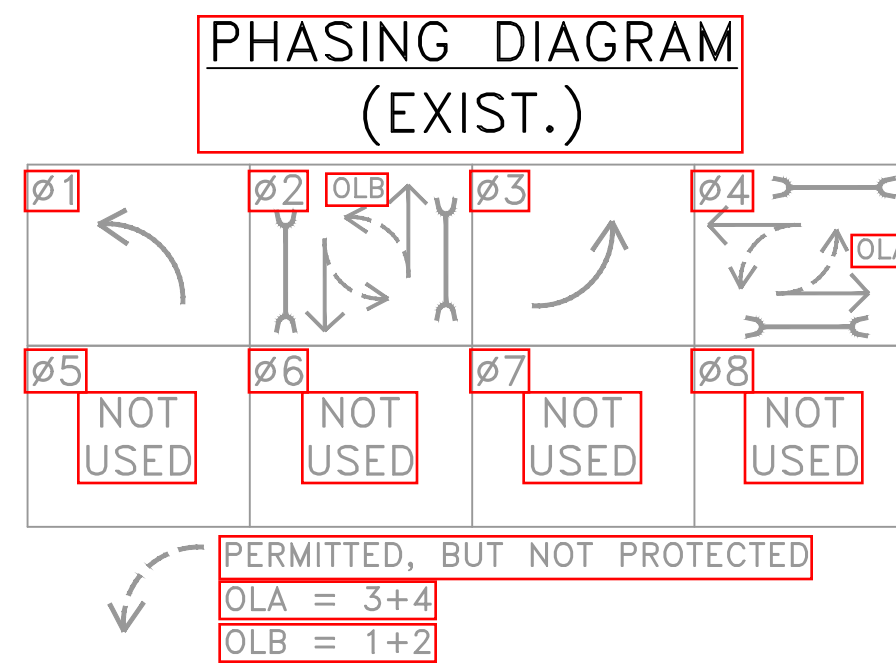
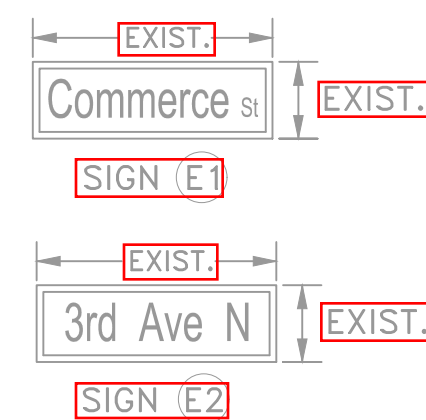
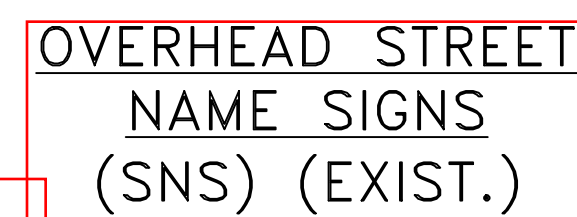
SHEET 7A

SPECIAL NOTE:
THE BASE SURVEY AND DESIGN INFORMATION FOR ROADWAY AND UTILITIES PRESENTED ON THIS PLAN WERE PROVIDED TO KCI TECHNOLOGIES, INC. BY METRO PUBLIC WORKS. WHERE AVAILABLE, BASE INFORMATION HAS BEEN SUPPLEMENTED BY PLANS OBTAINED FROM METRO PUBLIC WORKS AND FIELD OBSERVATIONS BY THE ENGINEER. KCI TECHNOLOGIES, INC. MAKES NO CLAIMS AS TO THE COMPLETENESS OR ACCURACY OF THE PROVIDED BASE INFORMATION.



EXISTING PED
DISPLAY
NON-L.E.D
COUNTDOWN

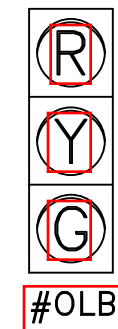
COLOR LEGEND
MAN - WHITE
HAND - PORTLAND
ORANGE



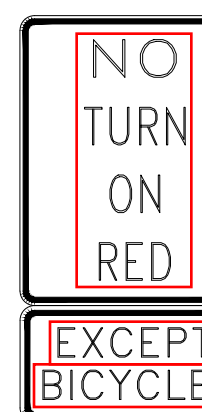
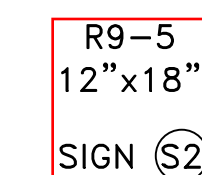
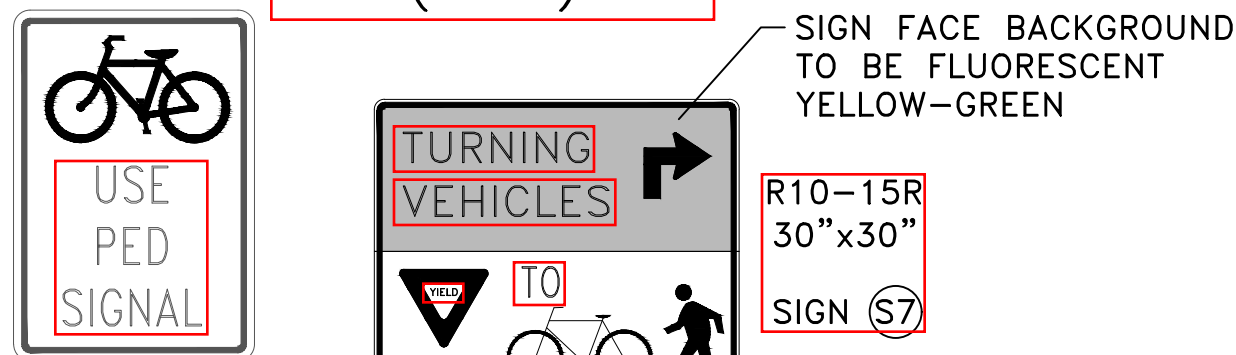
POLE	SH1	SH2	SNS1	S2	S5 S6	S7
#2	*	*	*	ON POLE	**	**
#4	*	*	*	ON POLE	**	**

NOTES:

- DISTANCES BASED ON APPROXIMATE SIGNAL POLE LOCATIONS INDICATED ON PLAN. EXISTING SIGNAL HEADS TO BE PLACED IN RELATION TO THE PROPOSED PAVEMENT MARKING LAYOUT.
- REFER TO TDOT STD. DWG. T-SG-9 FOR ADDITIONAL DETAILS.







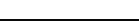









SIGNAL HEAD NOTE:
1. REMOVE EXISTING 5-SECTION
SIGNAL HEAD (PHASE 1) AND
REPLACE WITH NEW 3-SECTION
SIGNAL HEAD (PHASE OLB).

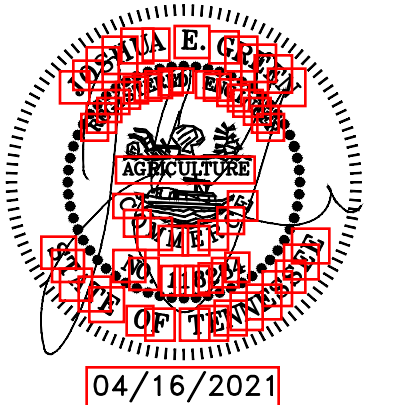


- SIGN S2 TO BE MOUNTED ON THE EXISTING SIGNAL POLE, DIRECTLY BELOW THE EXISTING PEDESTRIAN SIGNAL HEADS P2. SIGN TO HAVE BLACK LEGEND ON WHITE BACKGROUND.
- NEW SIGNS S5, S6, S7 MOUNTED TO EXISTING MAST ARM TO BE 4' MINIMUM FROM NEAREST SIGNAL HEAD AND SIGN.
- NEW SIGNS S5 & S6 TO BE ON A SINGLE FLAT ALUMINUM SHEET.

LEGEND

	SIGNAL SUPPORT POLE WITH MAST ARM (EXISTING)
	PEDESTAL POLE (EXISTING)
	SIGNAL HEAD W/ NUMBER (EXISTING)
	PEDESTRIAN SIGNAL HEAD W/ NUMBER (EXISTING)
	PAD MOUNTED TRAFFIC SIGNAL CONTROLLER (EXISTING)
	PULL BOX (EXISTING)
	UNDERGROUND CONDUIT (EXISTING)
	OVERHEAD STREET NAME SIGN W/ NUMBER (EXISTING)
	SIGNAL HEAD W/ NUMBER (NEW)
	POLE OR MAST ARM MOUNTED SIGN W/ NUMBER (NEW)
	GROUND MOUNTED SIGN (NEW, SEE PROPOSED PAVEMENT MARKING AND SIGNING PLAN)
	GROUND MOUNTED SIGN (EXISTING, SEE PROPOSED PAVEMENT MARKING AND SIGNING PLAN)
	TRAFFIC SIGNAL MODIFICATION FROM COMMERCE STREET PROJECT
	TRAFFIC SIGNAL MODIFICATION FROM COMMERCE STREET PROJECT

SPECIAL NOTE:
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METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

INTERSECTION NO. 1155

TRAFFIC SIGNAL MODIFICATION PLAN

3rd Avenue N and
Commerce Street

SCALE: 1"=20'

SHEET 8

				FILE NO.	891704370.13
				DATE:	04/16/2021
				DESIGNED BY:	JEG
				DRAWN BY:	JEG
				CHECKED BY:	JMC
REVISION BLOCK					
DATE:					
<div>  04/16/2021</div>					
METROPOLITAN GOVERNMENT OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TRAFFIC SIGNAL NOTES AND QUANTITIES					
3rd Avenue N					
N.T.S.					
SHEET 9					

3RD AVENUE NORTH - ESTIMATED SIGNAL QUANTITIES			
ITEM #	DESCRIPTION	UNIT	QUANTITY
712-08.06	UNIFORMED POLICE OFFICER	HOURL	160
713-15.05	STREET NAME SIGNS (INSTALL ONLY)	EACH	1
(1)(3)(7)713-16.21	SIGNS (36" X 36" ALUMINUM FLAT SHEET, R10-15R, TURNING VEHICLES YIELD TO BIKE/PED, RIGHT)	EACH	5
(4)(7)713-16.27	SIGNS (24" X 12" ALUMINUM FLAT SHEET, R3-7bP MOD., EXCEPT BICYCLES OVERSIZE PLAQUE)	EACH	4
(2)(7)713-16.31	SIGNS (24" X 18" ALUMINUM FLAT SHEET, R9-5, BIKES USE PED SIGNAL)	EACH	3
(2)713-16.31	SIGNS (24" X 18" ALUMINUM FLAT SHEET, R10-10b, BIKE SIGNAL)	EACH	1
(4)(7)713-16.33	SIGNS (30" X 36" ALUMINUM FLAT SHEET, R10-11a, NO TURN ON RED)	EACH	4
	717-01 MOBILIZATION	LS	1
(5)730-01.02	REMOVAL OF SIGNAL EQUIPMENT	EACH	1
(9)730-02.07	SIGNAL HEAD ASSEMBLY (130)	EACH	1
(8)(9)730-02.07	SIGNAL HEAD ASSEMBLY (130 BIKE SIGNAL)	EACH	1
(9)730-02.10	SIGNAL HEAD ASSEMBLY (130 A2)	EACH	2
(6)730-02.34	MAST ARM HARDWARE	EACH	41
	730-03-N PULL BOX (TYPE B TRAFFIC) 730-N TIER 22 LID	EACH	1
	730-08.03 SIGNAL CABLE - 7 CONDUCTOR	L.F.	1400
	730-12.02 CONDUIT 2" DIAMETER (PVC)	L.F.	50
	730-12.13 CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	50
	730-12.31 TRENCHING (SIDEWALK)	L.F.	20
	730-14.02 SAW SLOT	L.F.	350
	730-14.03 LOOP WIRE	L.F.	1000
	730-23.13 10' PEDESTRIAN POLE - CORE	EACH	1
(10)730-23.48B	CANTILEVER SIGNAL SUPPORT (1 ARM @ 20') CORE- CATEGORY 2	EACH	1
	730-24.07 FOUNDATION (PEDESTRIAN POLE 24" X 3') INSTALL ONLY	EACH	1
	730-26.05 COUNTDOWN PEDESTRIAN SIGNAL	EACH	2

FOOTNOTES

(1) SIGN SIZE TO BE 30" X 30".

(2) SIGN SIZE TO BE 12" X 18".

(3) SIGN FACE BACKGROUND TO BE FLUORESCENT YELLOW-GREEN.

(4) ITEM INCLUDES MOUNTING SIGN OVERHEAD ON MAST ARM. SIGNS TO BE ON A SINGLE FLAT ALUMINUM SHEET WITH A TOTAL SIZE OF 30" X 48".

(5) ITEM INCLUDES THE REMOVAL OF THE EXISTING 5-SECTION SIGNAL HEAD FOR THE NORTHBOUND 3RD AVENUE N APPROACH THE COMMERCE STREET INTERSECTION.

(6) ITEM IS FOR RELOCATION OF EXISTING SIGNAL HEADS BASED ON THE PROPOSED PAVEMENT MARKING LAYOUT ALONG 3RD AVENUE N. ALSO INCLUDES HARDWARE NEEDED FOR NEW POLE MOUNTED SIGNAL HEADS, NEW MAST ARM MOUNTED SIGNAL HEADS AND OVERHEAD SIGNS. PELCO GALAXY MOUNTING HARDWARE SHOULD BE USED. INCLUDES QUANTITIES FOR CHURCH STREET INTERSECTION.

(7) INSTALL OVERHEAD SIGNS USING ASTRO BRACKET TYPE HARDWARE.

(8) NEW BIKE SIGNAL HEAD TO HAVE 8" SIGNAL INDICATIONS.

(9) NEW SIGNAL HEADS SHOULD INCLUDE PELCO AEROFLEX BACKPLATES AND PELCO GALAXY MOUNTING

(10) ITEM TO INCLUDE NEW MAST ARM ONLY ATTACHED TO EXISTING SIGNAL SUPPORT.

1. ALL CONSTRUCTION, EQUIPMENT, AND INSTALLATION PROCEDURES SHALL COMPLY WITH THE TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SIGNAL INSTALLATION AND EQUIPMENT SHALL COMPLY WITH SECTION 730N--TRAFFIC SIGNALS (CURRENT EDITION). ALL PAVEMENT MARKINGS SHALL COMPLY WITH SECTION 716--PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL SUBMIT A MATERIALS LIST TO MDPW FOR REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION (CONTACT: MIKE HIRTZER, METRO TRAFFIC ENGINEERING, 615-880-3261).
3. INITIAL SIGNAL TIMINGS ARE TO BE PROVIDED BY MDPW. THE CONTRACTOR SHALL NOTIFY MDPW A MINIMUM OF THIRTY (30) DAYS PRIOR TO ACTIVATION OF THE TRAFFIC SIGNAL.
4. ~~CONSTRUCT THE CONTROLLER CABINET AND FOUNDATION IN ACCORDANCE WITH TDOT STANDARD DRAWINGS. AN APPROPRIATE CABINET AND FOUNDATION SHALL BE INSTALLED PER MDPW SPECIFICATIONS: TYPE IV 55" X 44" X 26" ALUMINUM TYPE IV-C 50" X 36" X 17¾" ELECTROSTATIC-PAINTED BLACK.~~
5. ~~THE CONTRACTOR SHALL CONNECT THE EXISTING SIGNAL COMMUNICATIONS CABLE TO THE NEW TRAFFIC SIGNAL CONTROLLER CABINET. THE CONNECTION SHALL BE MADE BY SPLICING THE EXISTING CABLE IN A MANNER ACCEPTABLE TO MDPW. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH MDPW AND RECEIVE MDPW APPROVAL PRIOR TO SPLICING THE EXISTING CABLE.~~
6. ALL UTILITY LOCATIONS, AS SHOWN, ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY. SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ELECTRICAL SERVICE TO THE SITE.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL UTILITIES FOR ANY "MAKE READY" WORK REQUIRED. MDPW SHALL BE RESPONSIBLE FOR THE ACTUAL COST OF "MAKE READY" WORK.
- 9.A ~~CONTRACTOR SHALL INSTALL A 50 AMP, 2 POLE WEATHERPROOF EXTERNAL DISCONNECT ON THE POLE WITH A/C SERVICE CONNECTION. ENCLOSURE SHALL BE METALLIC WITH A 50 AMP SINGLE POLE CIRCUIT BREAKER.~~
- 9.B ~~CONTRACTOR SHALL INSTALL UNDERGROUND ELECTRIC SERVICE CONNECTION IN A TYPE B PULL BOX LABELED "TRAFFIC SIGNAL". PULL BOX SHALL HAVE A 30 AMP KTK FUSE AND WATER PROOF FUSE HOLDER WITH #6 AWG WIRES COLOR CODED BLACK, WHITE, AND GREEN. POWER SERVICE SHOULD BE INSTALLED IN A 2" CONDUIT FROM NES VAULT TO CONTROLLER CABINET.~~
10. ~~VEHICLE DETECTION LOOPS SHALL MEASURE 6' X 45' QUADRAPOLE LOOPS WITH TWO TURNS OF WIRE, UNLESS SPECIFIED OTHERWISE. LOOPS SHALL BE CENTERED IN THE TRAVEL LANES. LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND MDPW LOOP SPECIFICATIONS, UNLESS OTHERWISE NOTED.~~
11. ~~ALL EQUIPMENT NECESSARY FOR RADAR DETECTION SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED IN THE CABINET.~~
12. ~~ALL FOUNDATIONS SHALL HAVE A SPARE 2-INCH STUBOUT PARALLEL TO THE ROAD (POLES AND CONTROLLER).~~
13. THE PROPOSED LOCATIONS FOR THE SIGNAL SUPPORT POLES, AS SHOWN ON THESE PLANS, ARE APPROXIMATE. SOME FIELD ADJUSTMENT MAY BE REQUIRED IN ORDER TO AVOID CONFLICT WITH EITHER OVERHEAD OR UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND STAKING THE OPTIMUM LOCATIONS FOR

- THESE POLES AND FOR RECEIVING APPROVAL FROM THE ENGINEER AND THE APPROPRIATE UTILITIES BEFORE INSTALLATION BEGINS. PROPER ROADSIDE CLEAR ZONES SHALL BE OBSERVED.
14. SHAFTS FOR FOOTINGS SHALL BE DRILLED THROUGH FIRM, UNDISTURBED, UNSATURATED SOIL AND SHALL BE VISUALLY INSPECTED BY THE ENGINEER OR ENGINEERING REPRESENTATIVE PRIOR TO PLACEMENT OF REINFORCEMENT. THE ENGINEER OR ENGINEERING REPRESENTATIVE SHALL BE ADVISED BY THE CONTRACTOR OF ANY GROUND WATER OR LOOSE SOIL ENCOUNTERED DURING DRILLING. FOOTINGS SHALL COMPLY WITH TDOT STANDARD DRAWINGS.
15. SIGNAL HEADS VISIBLE TO DRIVERS BUT NOT OPERATIONAL SHALL BE COMPLETELY COVERED.
16. ~~SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS PRIOR TO ACTIVATION OF THE TRAFFIC SIGNAL; UNLESS OTHERWISE SPECIFIED BY MDPW TRAFFIC ENGINEER.~~
17. IF FIELD ADJUSTMENTS RESULT IN CHANGES TO SIGNAL HEAD PLACEMENT, ATTACHMENT HEIGHTS, OR SPAN WIRE/MAST ARM LENGTH, THE ENGINEER SHALL BE ADVISED AND SHOP DRAWINGS SHALL BE RE-EVALUATED TO VERIFY THAT THE CHANGES ARE STRUCTURALLY ACCEPTABLE.
18. ALL STOP LINES, CROSSWALK LINES, LANE LINES, AND PAVEMENT ARROWS SHALL BE THERMOPLASTIC. STOP LINES SHALL BE 24 INCHES WIDE. ALL CONFLICTING MARKINGS SHALL BE REMOVED USING AN ACCEPTABLE METHOD AS SPECIFIED BY TDOT SPECIFICATION SECTION 712--TEMPORARY TRAFFIC CONTROL. EXISTING PAVEMENT MARKINGS SHALL BE REAPPLIED AS NECESSARY.
19. STREET NAME SIGNS ARE TO BE PROVIDED BY MDPW AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. CONTACT MDPW SIGN SHOP A MINIMUM OF THIRTY (30) DAYS PRIOR TO EXPECTED SIGN INSTALLATION DATE FOR SIGN PREPARATION.
20. ALL ITEMS INSTALLED WITHIN THE PEDESTRIAN PATH OF TRAVEL (I.E. SIDEWALK) SHALL MEET THE METRO PUBLIC WORKS STANDARD DETAILS. THIS INCLUDES A MINIMUM PATH OF TRAVEL WIDTH OF 60" AND A PROTRUDING OBJECT LIMIT OF 4" IF MOUNTED AT A HEIGHT BETWEEN 27" AND 80" AND WITHIN THE PATH OF TRAVEL. VARIANCES MUST BE APPROVED BY MDPW.
21. EXISTING SIGNAL EQUIPMENT TO BE REMOVED BY THE CONTRACTOR. ALL SALVAGED EQUIPMENT TO BE RETURNED TO MDPW.
22. EXISTING SIGNAL EQUIPMENT SHALL REMAIN IN OPERATION UNTIL NEW SIGNAL EQUIPMENT IS COMPLETE AND IN FULL OPERATION.
23. ALL NEW SIGNAL HEADS SHALL BE FABRICATED FROM ALUMINUM. ALL NEW SIGNAL HEADS SHALL BE LED TYPE, GELCORE OR METRO APPROVED ALTERNATE. SIGNAL HEAD EQUIPMENT (I.E. FRAME AND ILLUMINATION TYPE) SHALL BE APPROVED BY MDPW PRIOR TO INSTALLATION. ATTACHMENT TO BE WITH "ASTRO" BRACKETS.
24. ~~CABINET AND CONTROLLER MUST HAVE ALL EQUIPMENT NECESSARY TO PROVIDE SIGNAL COMMUNICATION VIA PHONE DROP. CONTRACTOR TO FURNISH CELL MODEM. THIS INCLUDES 2" RISER WITH PULL LINE. THIS DOES NOT INCLUDE THE INSTALLATION OF THE PHONE LINE ITSELF.~~
25. ~~CABINET/CONTROLLER TO INCLUDE COORDINATION MODULE, ETHERNET PORT, COMMUNICATIONS PANEL AND OTHER CABINET WIRING AS REQUIRED FOR SYSTEM OPERATION. CONTROLLER TO BE COMPATIBLE WITH EXISTING MDPW SIGNAL MANAGEMENT SOFTWARE AS SPECIFIED.~~
26. ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED IN FULL COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD, FEDERAL REGISTER 36 CFR PARTS 1190 AND 1191, ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES; ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES; PROPOSED RULE, PUBLISHED IN THE FEDERAL REGISTER ON JULY 23, 2004, AS HAS BEEN ADOPTED BY METRO.
27. TRAFFIC SIGNAL SUPPORT POLES SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES, AND TRAFFIC SIGNALS (2009 EDITION). WIND LOADS SHALL BE BASED ON A BASIC WIND SPEED OF

- 90MPH WITH A RECURRENCE INTERVAL OF 50YRS. USE THE FATIGUE CATEGORY AS NOTED ON EACH PROPOSED SIGNAL LAYOUT. FATIGUE LOADS ARE BASED ON THE REQUIREMENTS OF SECTION 11.7 AND THE FOLLOWING LOADS: GALLOPING – NO DESIGN NECESSARY. VIBRATION DAMPENERS SHALL BE USED ON ALL MAST ARMS 50' OR GREATER. VORTEX SHEDDING – NOT APPLICABLE ON TRAFFIC SIGNAL SUPPORTS WITH A TAPER OF AT LEAST 0.14 IN/FT. NATURAL WIND GUST – THE YEARLY MEAN WIND SPEED FOR NATURAL WIND GUSTS SHALL BE 11.2MPH. TRUCK INDUCED GUST – NO DESIGN NECESSARY. THE TRAFFIC SIGNAL SUPPORT POLES SHALL BE POLES WITH CURVED MAST ARMS IN ACCORDANCE WITH MDPW 730–N POLE AND LIGHTING SPECIFICATIONS JANUARY 31, 2014. FOR POLE AND ARM DETAILS, AND TO CONFIRM DESIGN CRITERIA, CONTACT MIKE HIRTZER, METRO TRAFFIC ENGINEERING, 615-880-3261.
28. ALL OPEN CUTS AND TRENCH REPAIRS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH CURRENT MDPW STANDARD DRAWINGS.
29. ALL SIDEWALK AND RAMP REPAIRS SHALL COMPLY WITH CURRENT MDPW STANDARD DRAWINGS.
30. ALL CONDUITS SHALL BE SCHEDULE 80 PVC UNLESS OTHERWISE NOTED. CONDUIT SHALL BE LAID AT A MINIMUM DEPTH OF 24 INCHES BELOW FINISHED GRADE AND SHALL COMPLY WITH TDOT TRENCHING DETAILS AND CONDUIT PLACEMENT. THE CONTRACTOR SHALL SEAL ALL OPEN CONDUIT ENTRANCE HOLES, WITH OR WITHOUT CABLES, WITH CONDUIT DUCT SEAL PUTTY OR CONDUIT PLUGS. WHERE CABLE ENTER THE CONDUIT, THE SEALANT SHALL BE APPLIED AFTER INSTALLING THE CABLE. THESE LOCATIONS SHALL CONSIST OF CONDUIT ENDS AND PULL BOXES, CABINET BASES AND WEATHER–HEADS.
31. THE PLAN SHEET HAVE BEEN DEVELOPED WITH EXISTING DATA AVAILABLE FROM MULTIPLE SURVEYS AND FIELD VISITS. ALL ITEMS INCLUDED AND SHOWN HEREIN ARE BELIEVED TO REFLECT EXISTING CONDITIONS TO A REASONABLE DEGREE OF ACCURACY. HOWEVER, THE CONTRACTOR HAS FINAL RESPONSIBILITY TO VERIFY ALL EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO, UNDERGROUND UTILITIES, PROPERTY LINES AND DRAINAGE STRUCTURES.
32. ~~OPERATION OF EACH INTERNALLY-ILLUMINATED STREET NAME SIGN SHALL BE CONTROLLED THROUGH THE USE OF A SINGLE PHOTO-CELL (GRAINGER PART #K-4021 OR EQUIVALENT) LOCATED IN THE TOP OF THE CONTROLLER CABINET. INTERNALLY-ILLUMINATED STREET NAME SIGNS SHALL BE WIRED TO A SEPARATE 6 POSITION TERMINAL BLOCK AND A SEPARATE 6 POSITION GROUND BAR LOCATED IN THE CONTROLLER CABINET.~~
33. SIGNAL HEADS SHALL INCLUDE LOUVERED BACKPLATES WITH A 1" MINIMUM YELLOW RETRO REFLECTIVE BORDER AROUND THE PERIMETER OF THE FACE OF THE BACKPLATE. THE RETRO REFLECTIVE BORDER TO BE MADE OF A TYPE III PRISMATIC MATERIAL.
34. UTILITY MARKINGS SHALL BE CHALK BASED MARKING PAINT ON ASPHALT AND SIDEWALKS, AND REMOVED ONCE CONSTRUCTION IS COMPLETED.
35. A SINGLE #6 BCW CABLE (#6 COPPER SOFT DRAWN BARE-GROUND, ITEM NUMBER 714-06.08) SHALL BE INSTALLED IN EVERY DIRECTIONAL DRILLED CONDUIT ROUTE ALONG WITH A ⅝ CW GROUND ROD AT THE BASE OF EACH SIGNAL POLE. A SEPARATE #6 BWC CABLE SHALL BE UTILIZED FOR THE CONTROLLER CABINET ALONG WITH A ⅝ CW GROUND ROD. THE SIGNAL POLES SHALL NOT BE BONDED TO THE CONTROLLER CABINET. ALL CONDUIT RUNS BETWEEN PULL BOXES OR BETWEEN PULL BOXES AND POLES TO HAVE A LOCATE WIRE, ITEM NUMBER 730-14.03.